Building (im)perfection

Daan Wierikx
TU Delft | Urban
Architecture


N


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Current situation





Motivation





Design of a ecological community on the friche

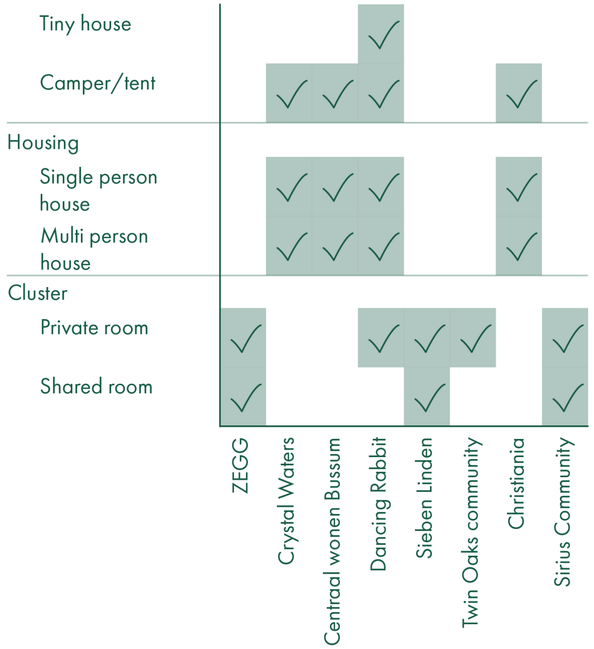
What is a ecological community?

Intentional communities and ecovillages are both communities which practice **an alternative lifestyle**, in a place often outside of normal society. Living **an eco conscious life.**


Centraal wonen Bussum
Christiania
ZEGG
Sirius Community
Dancing Rabbit
Sieben Linden
Twin Oaks community
Friche Josaphat
Crystal Waters


FOOT TRAFFIC
ONLY
BEYOND THIS
POINT PLEASE
* and bikes too!

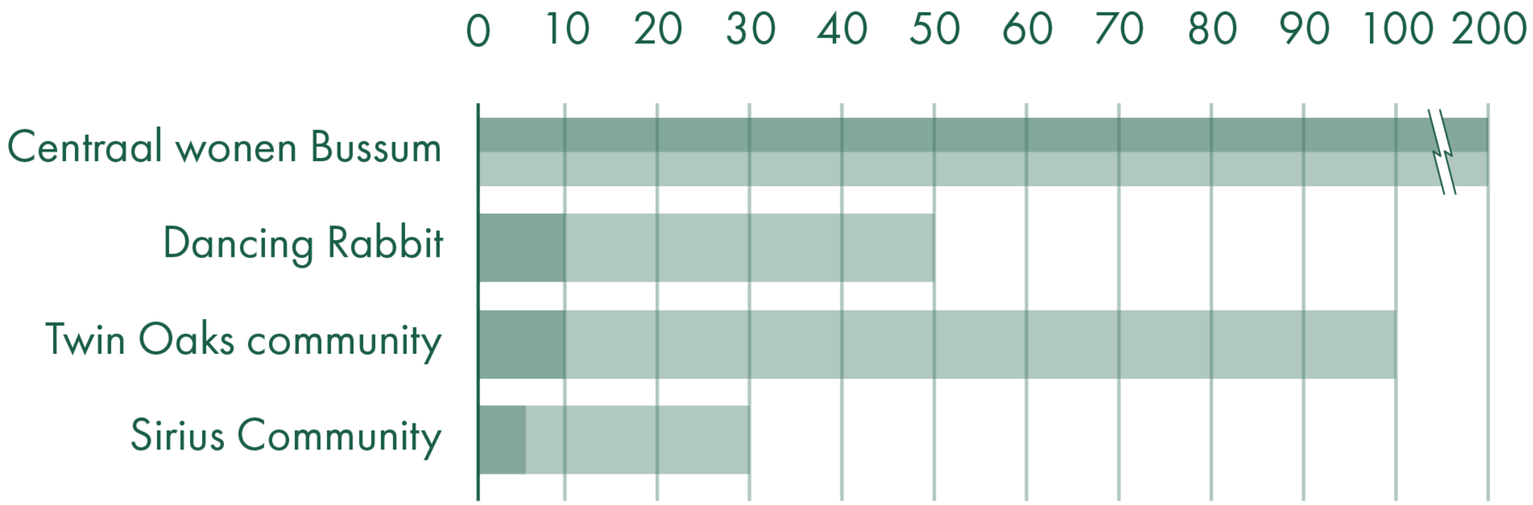


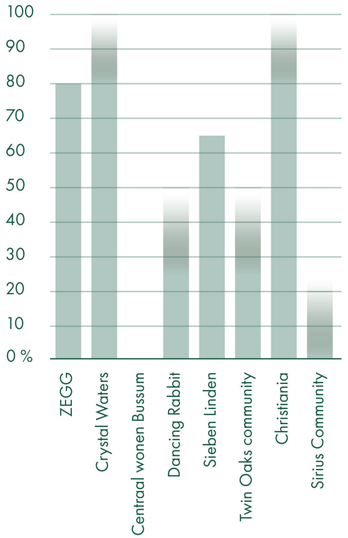


	Number of inhabitants	Most common dwelling type
ZEGG	>100	Cluster
Dancing Rabbit	45	Housing
Sieben Linden	>150	Cluster
Twin Oaks community	>100	Cluster
Sirius Community	30	Cluster
Christiania	900	Housing
Crystal Waters	>240	Housing
Centraal wonen Bussum	>200	Housing

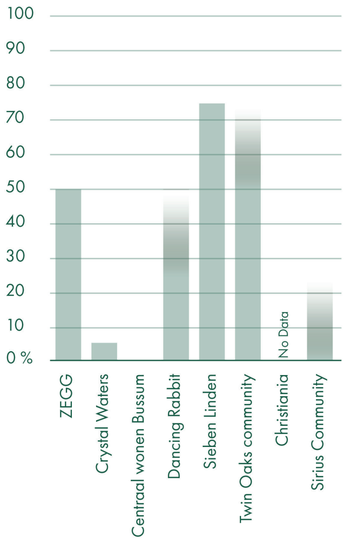





0
10
20
30
40
50
60
70
80
90
100
200
Centraal wonen Bussum
Dancing Rabbit
Twin Oaks community
Sirius Community



Energy production



Food production







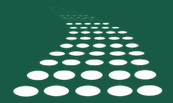
Start with around 20 individuals, growth to 100



Cluster-style dwellings



Generate at least half of energy and food needs



Walking or bicycle paths



Private entrance



Public building



Combining functions



Well lit spaces



Private areas for inhabitants

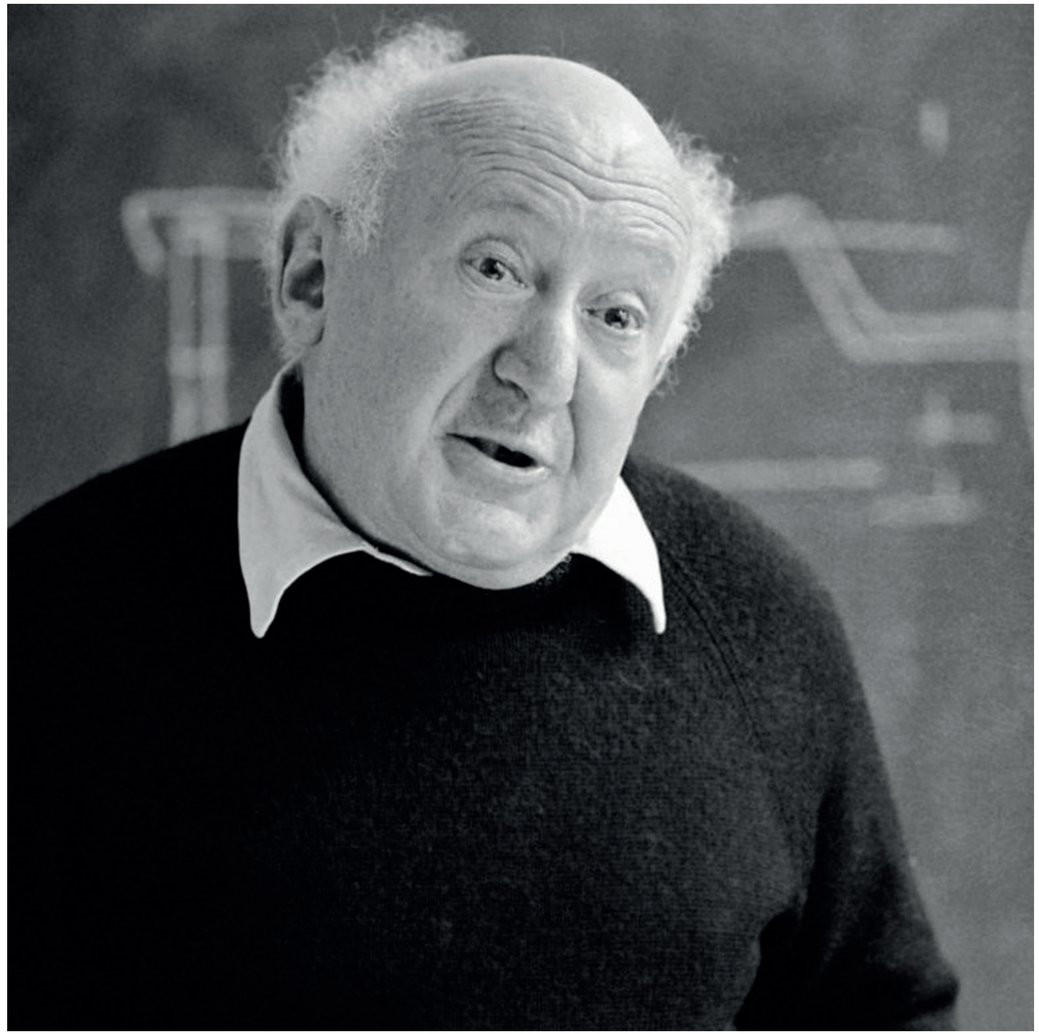


Separable spaces

Guidelines



Start with around 20 individuals,
growth to 100



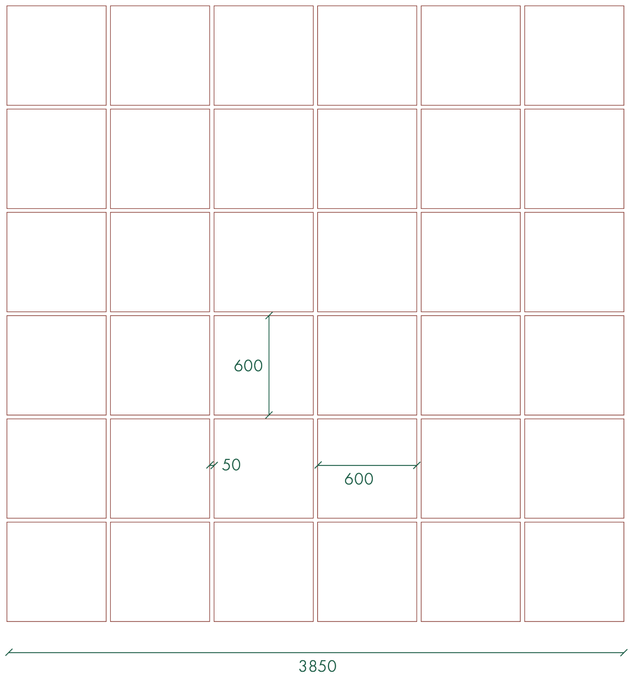


I. Grid

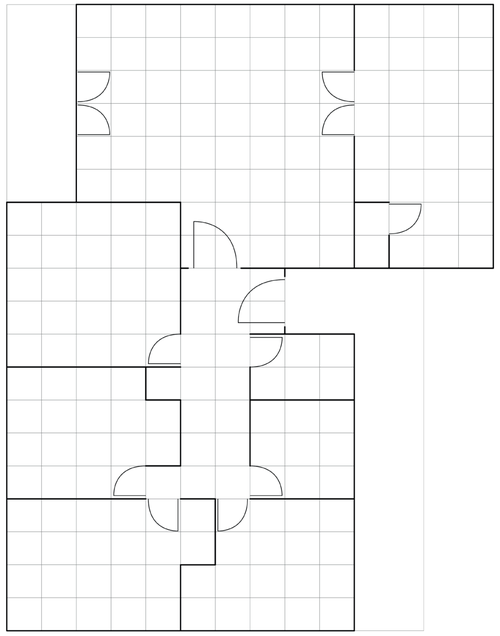
II. Design

III. Structure

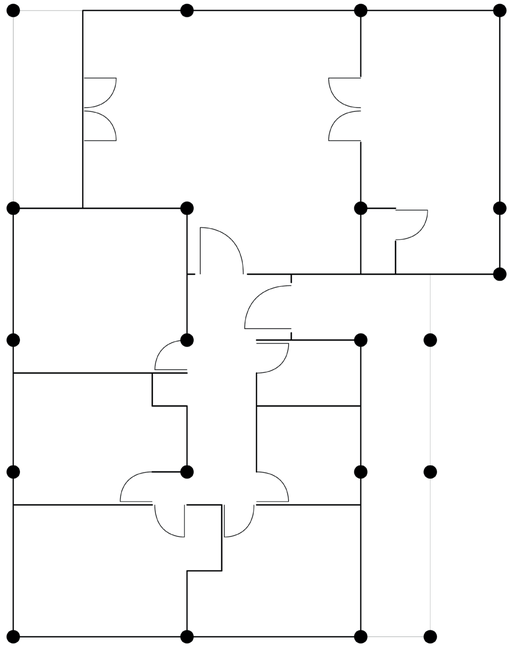
Grid



Design



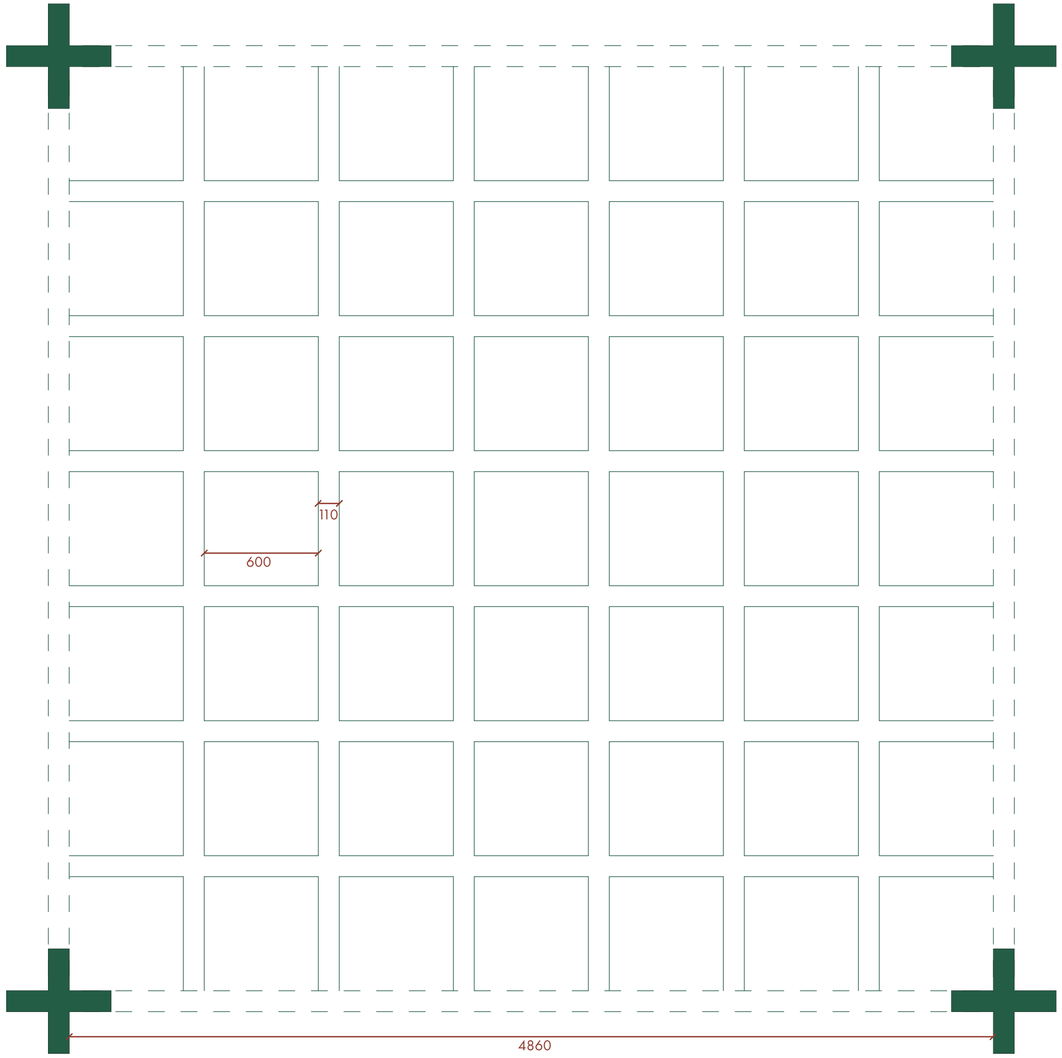
Structure



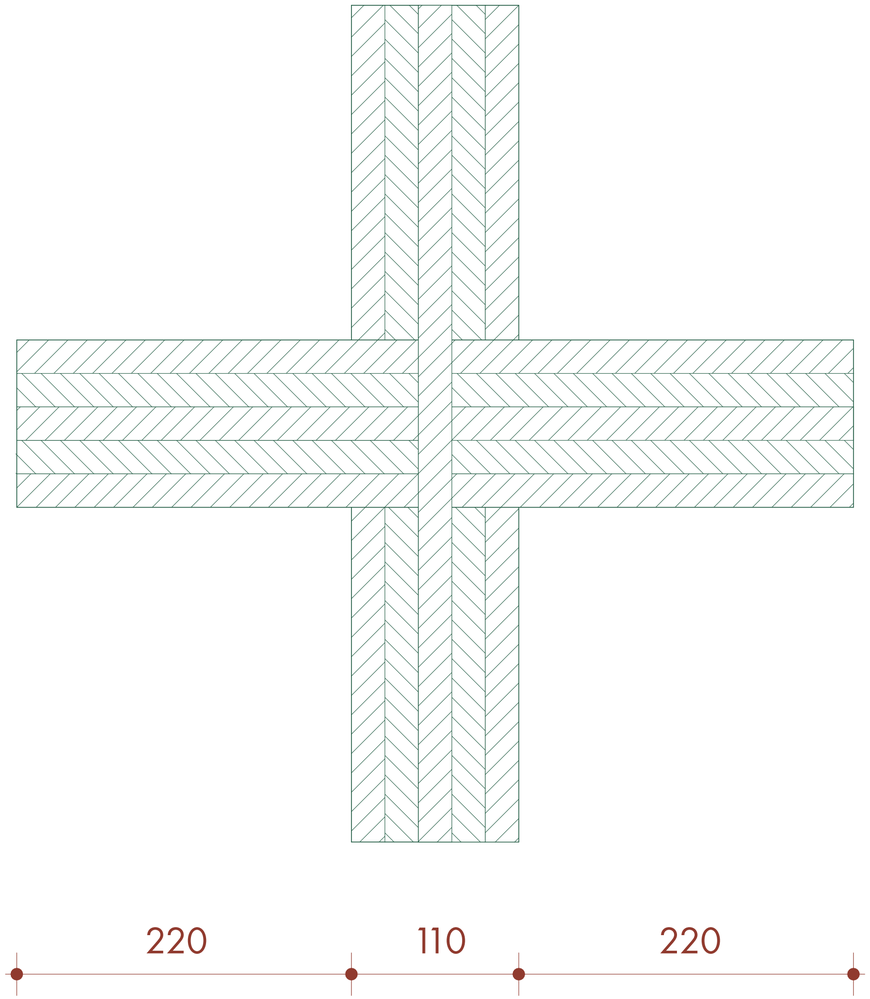
I. Grid

II. Structure

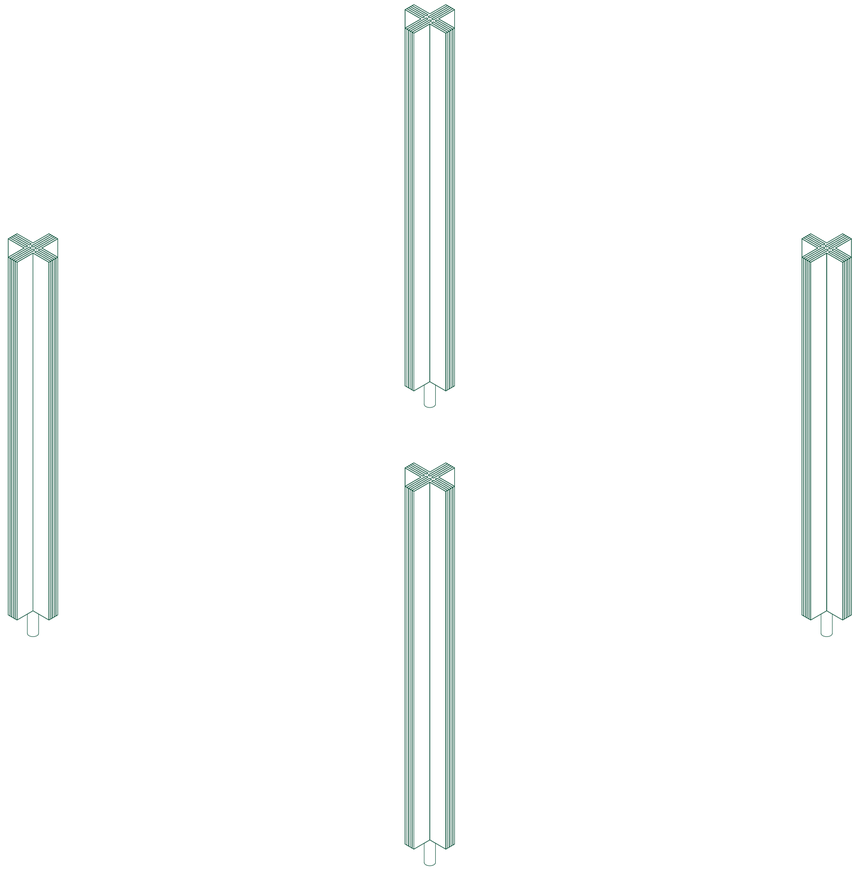
III. Design



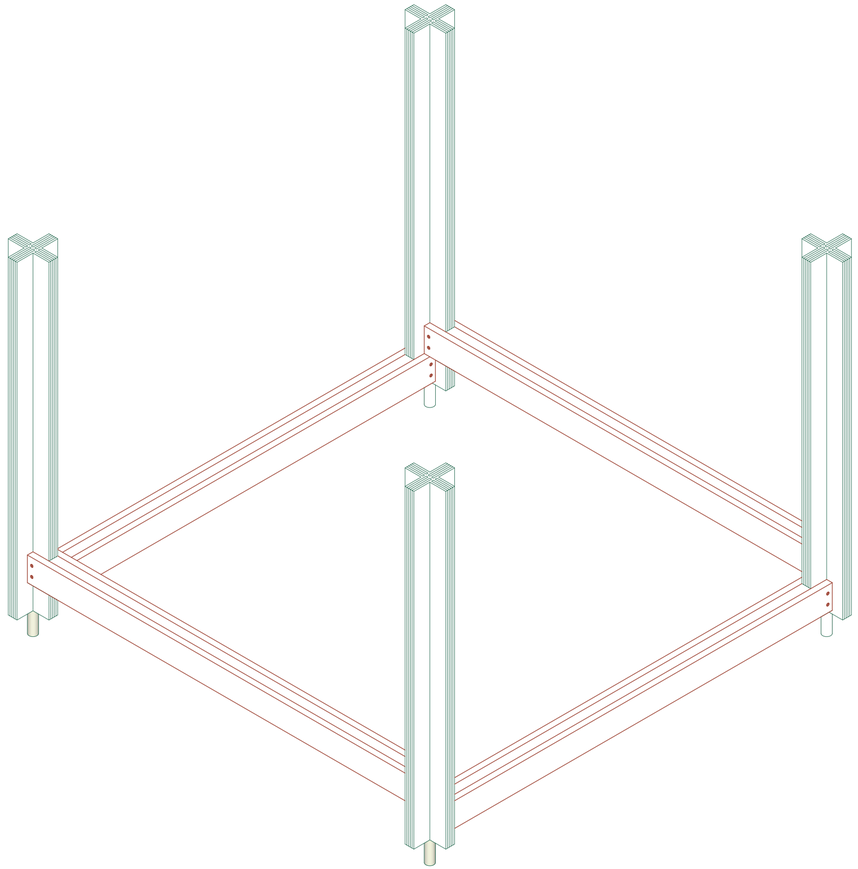
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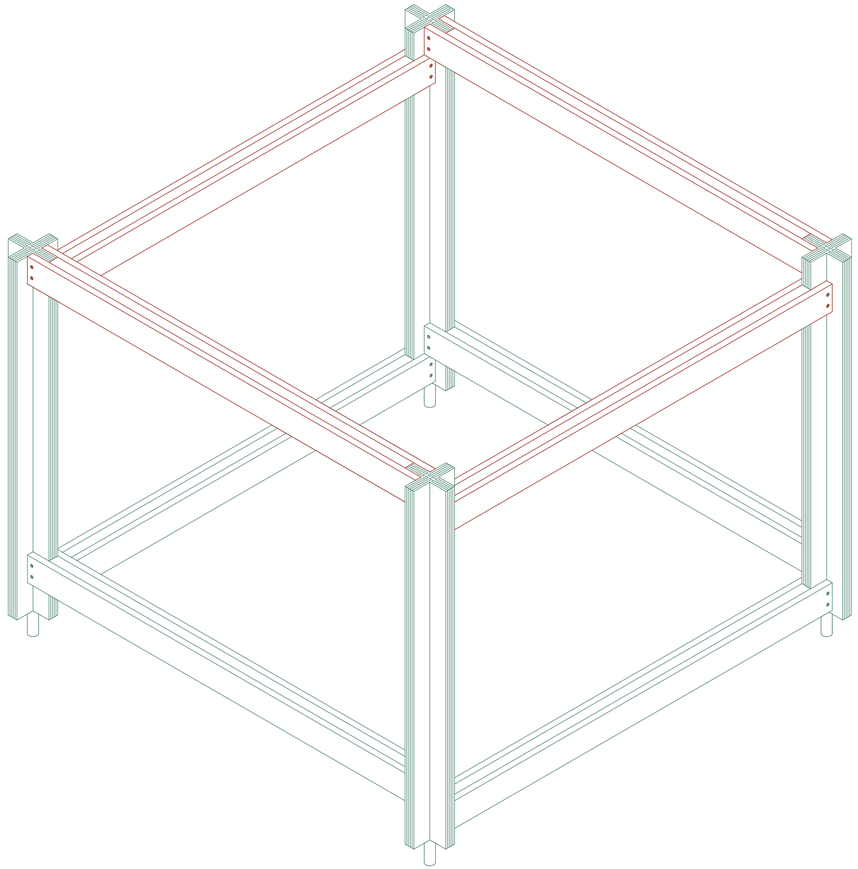
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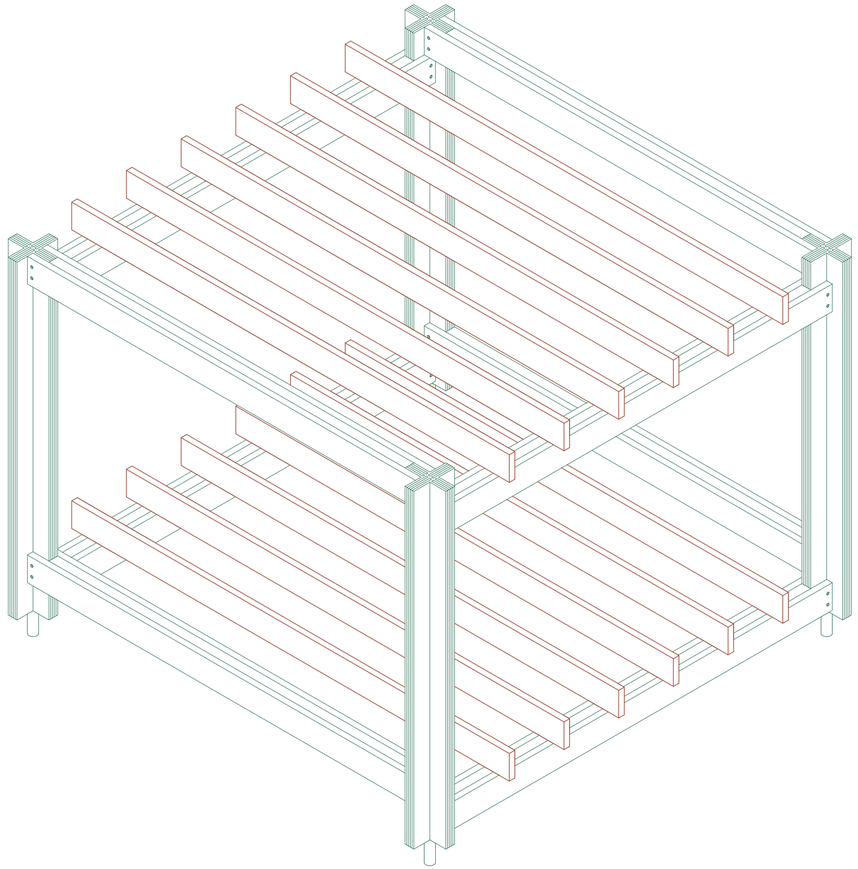
Building system



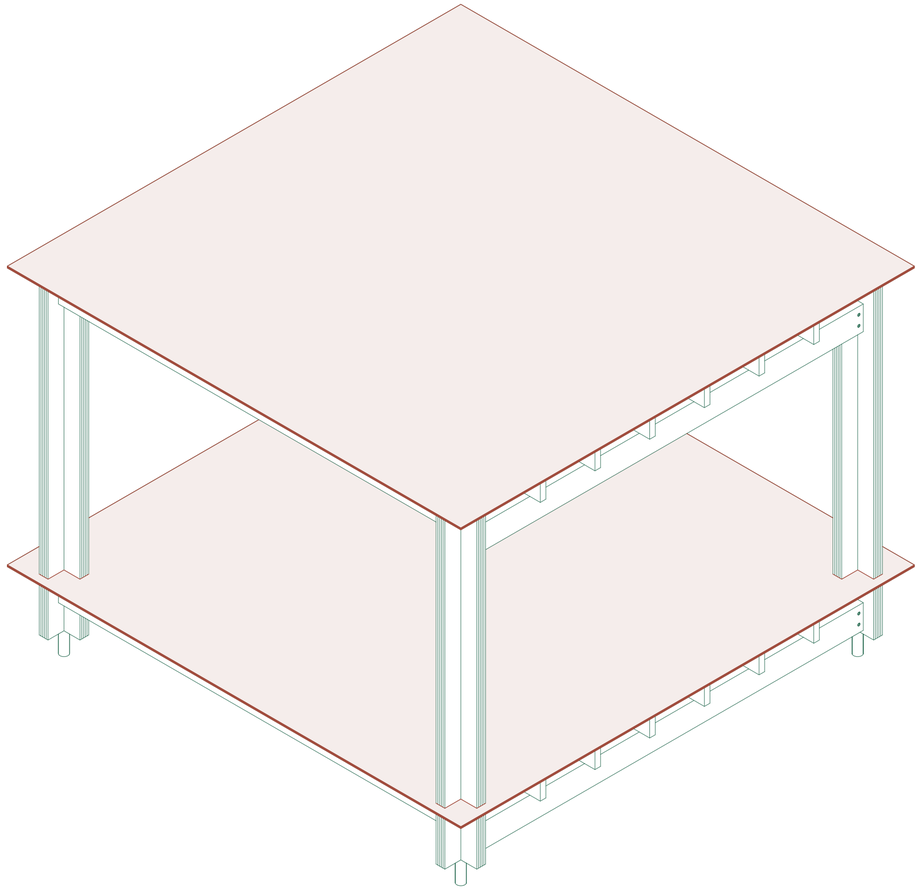
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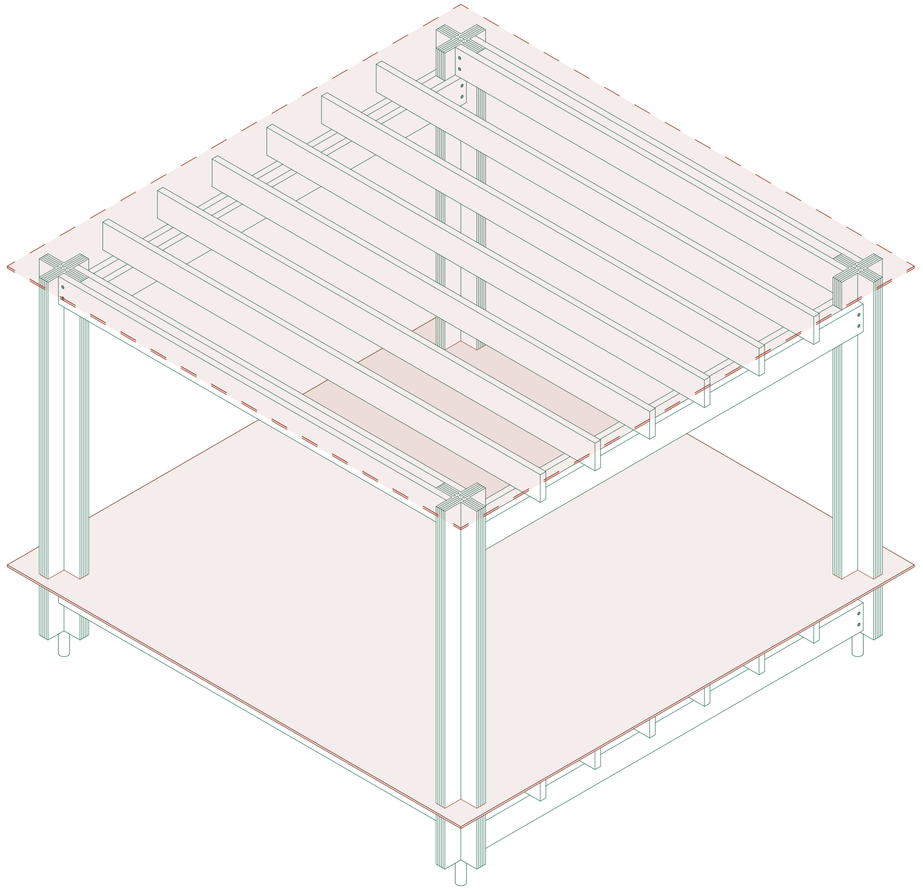
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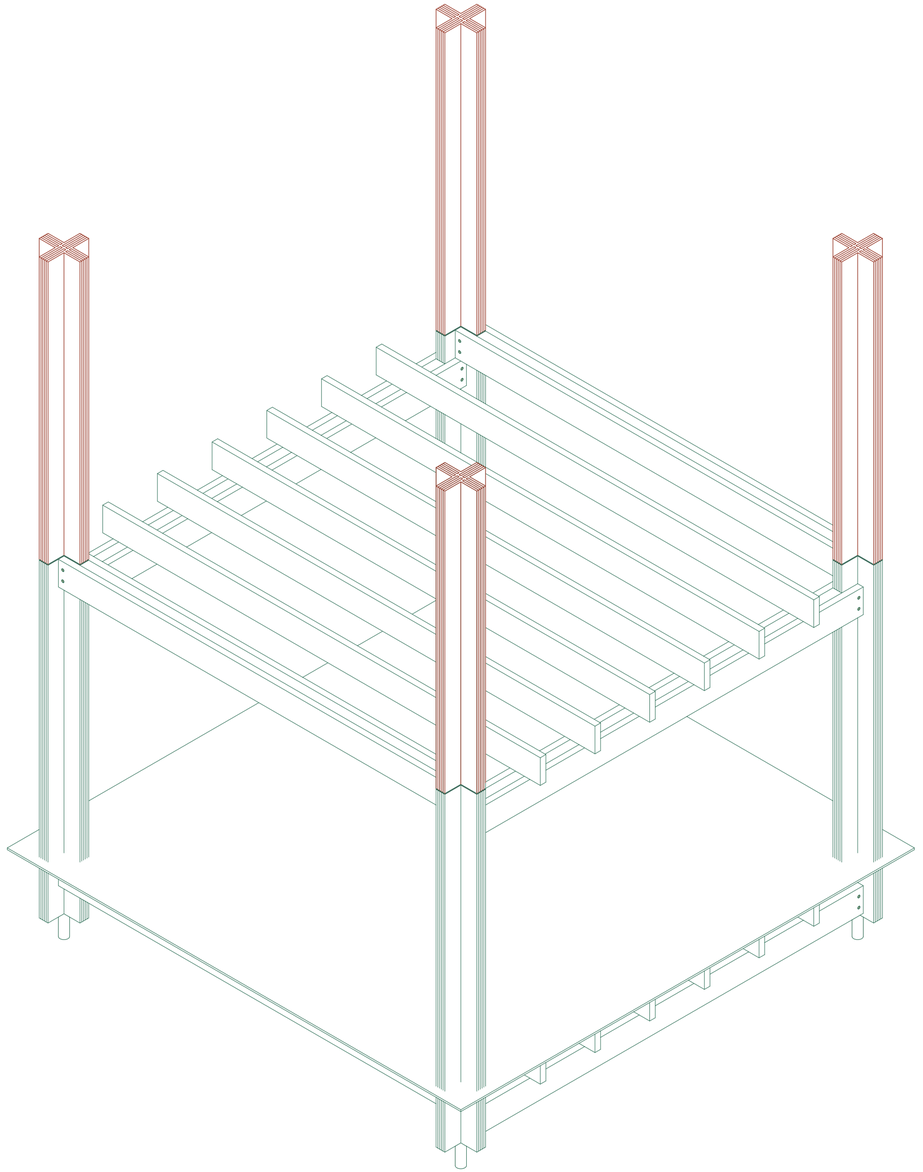
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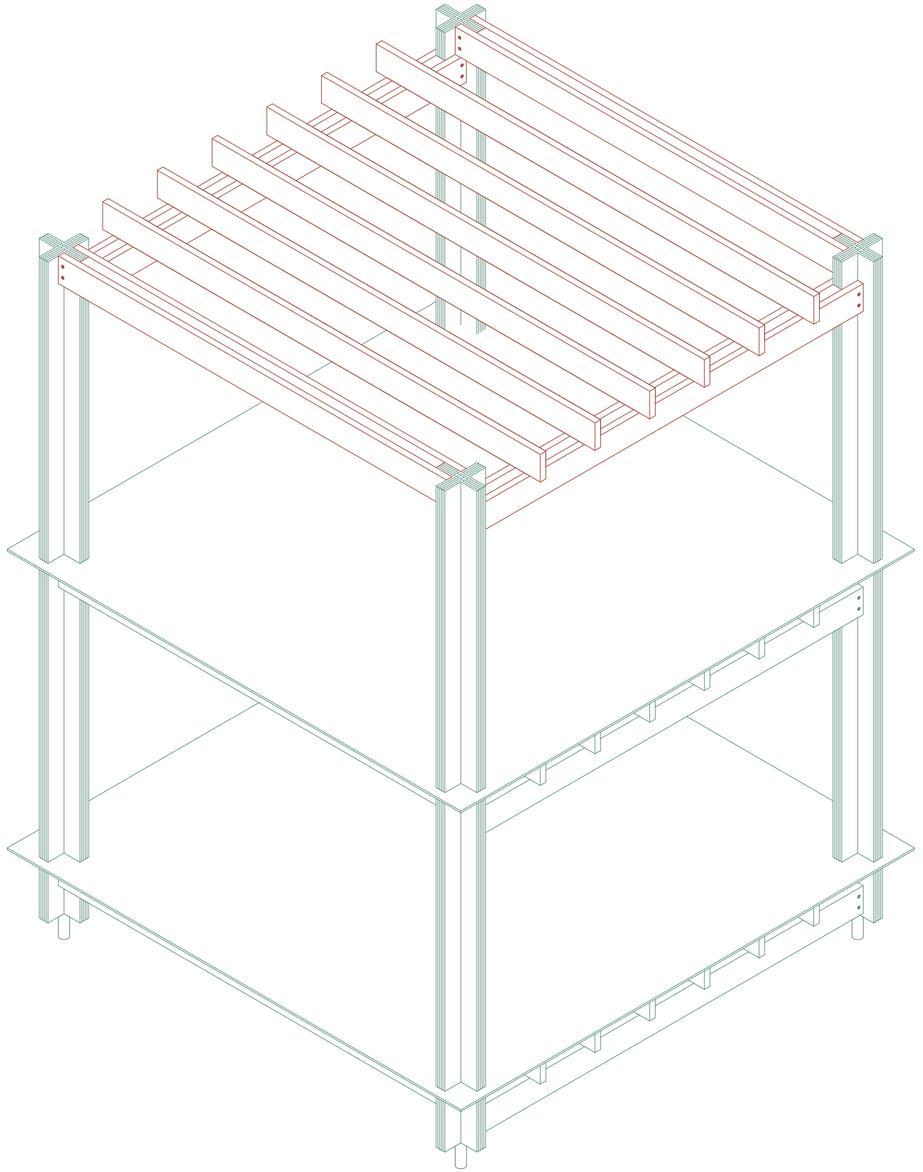
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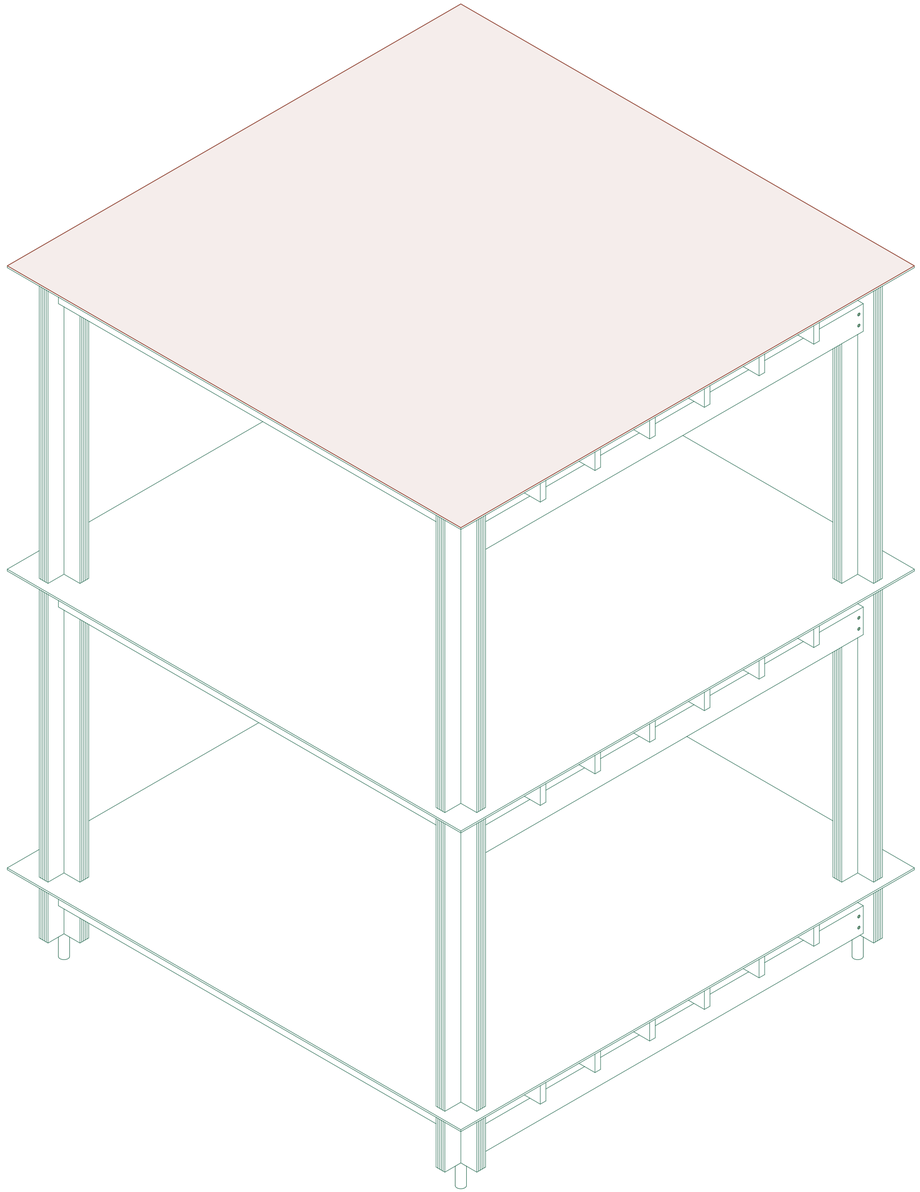
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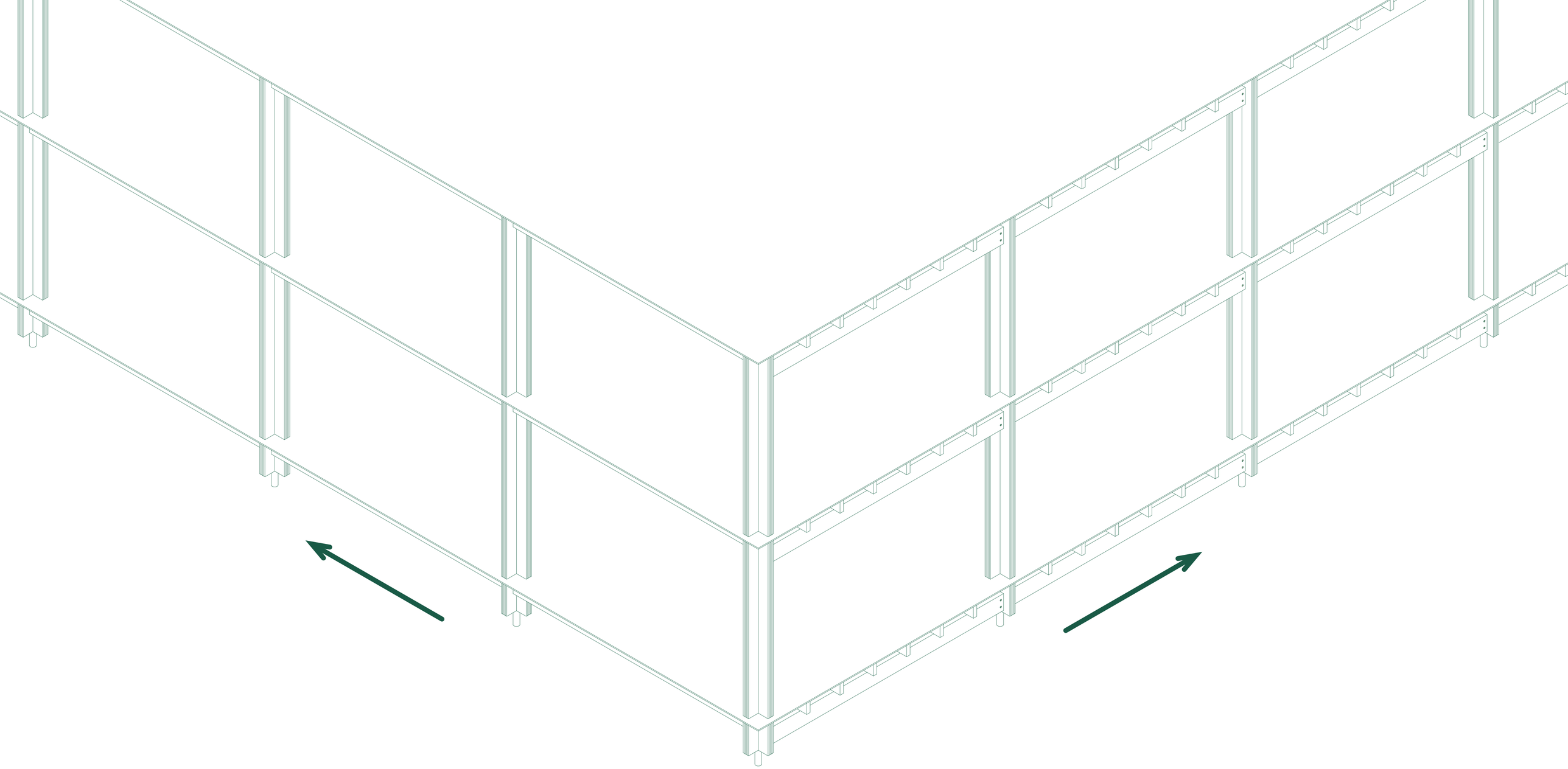
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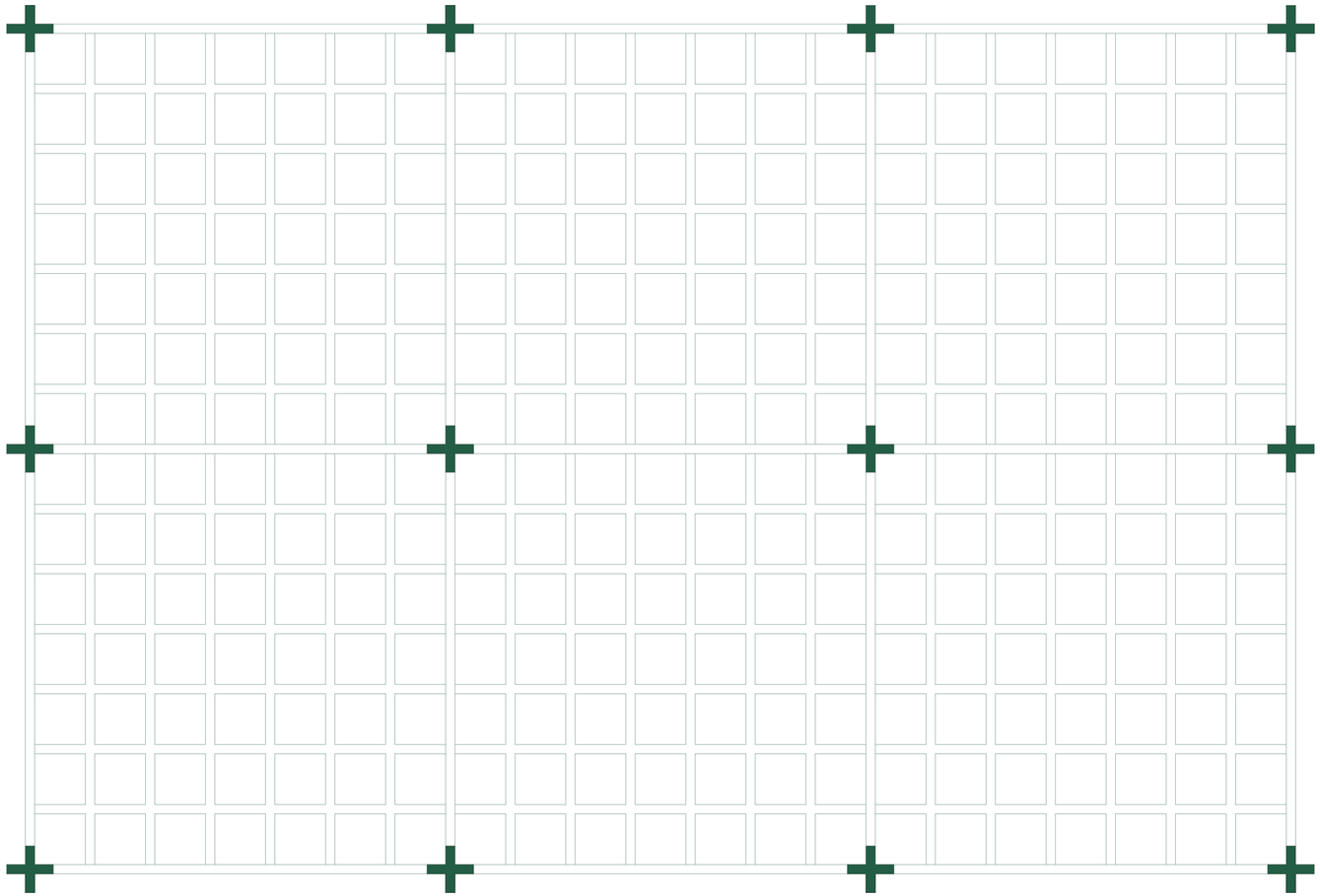
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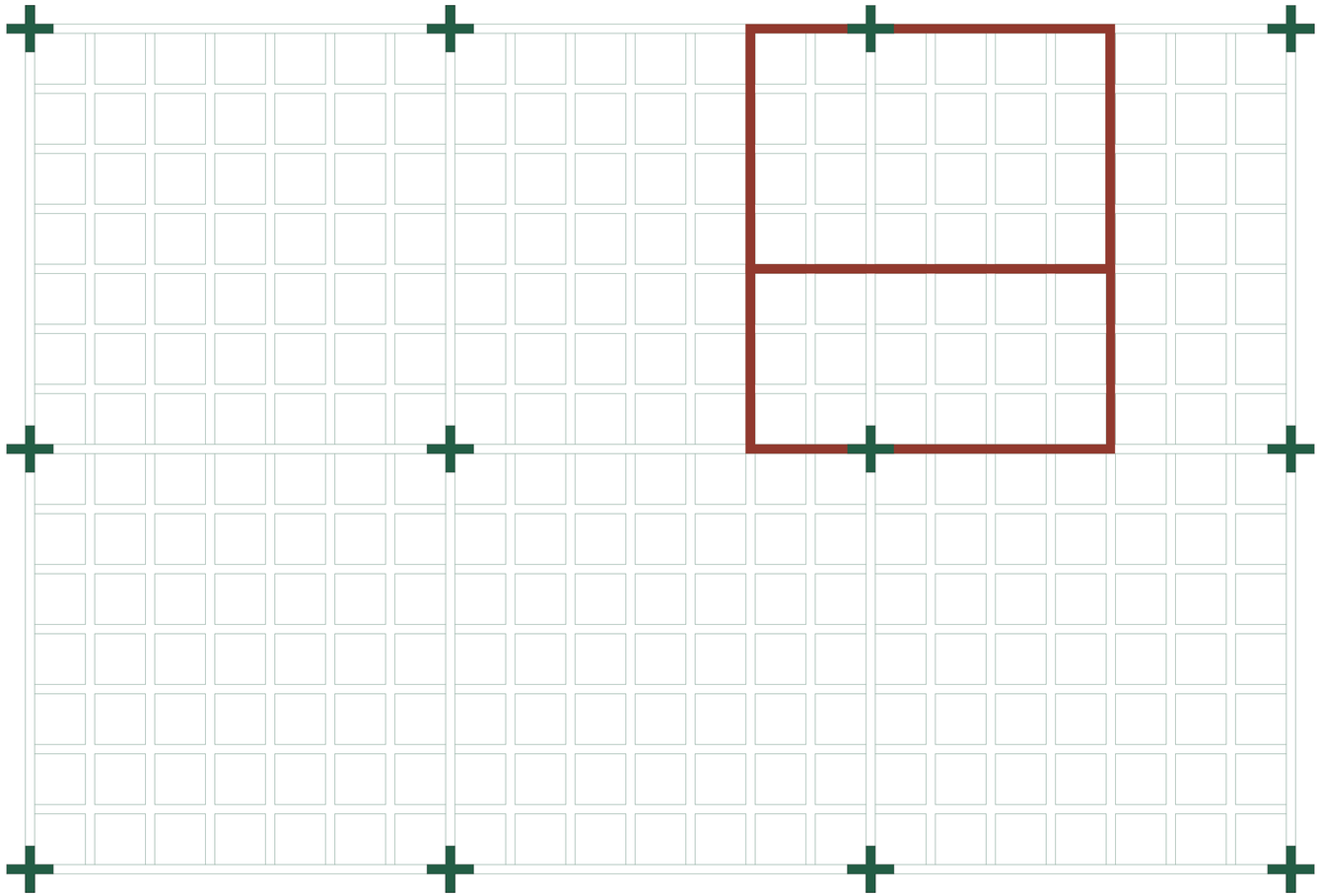
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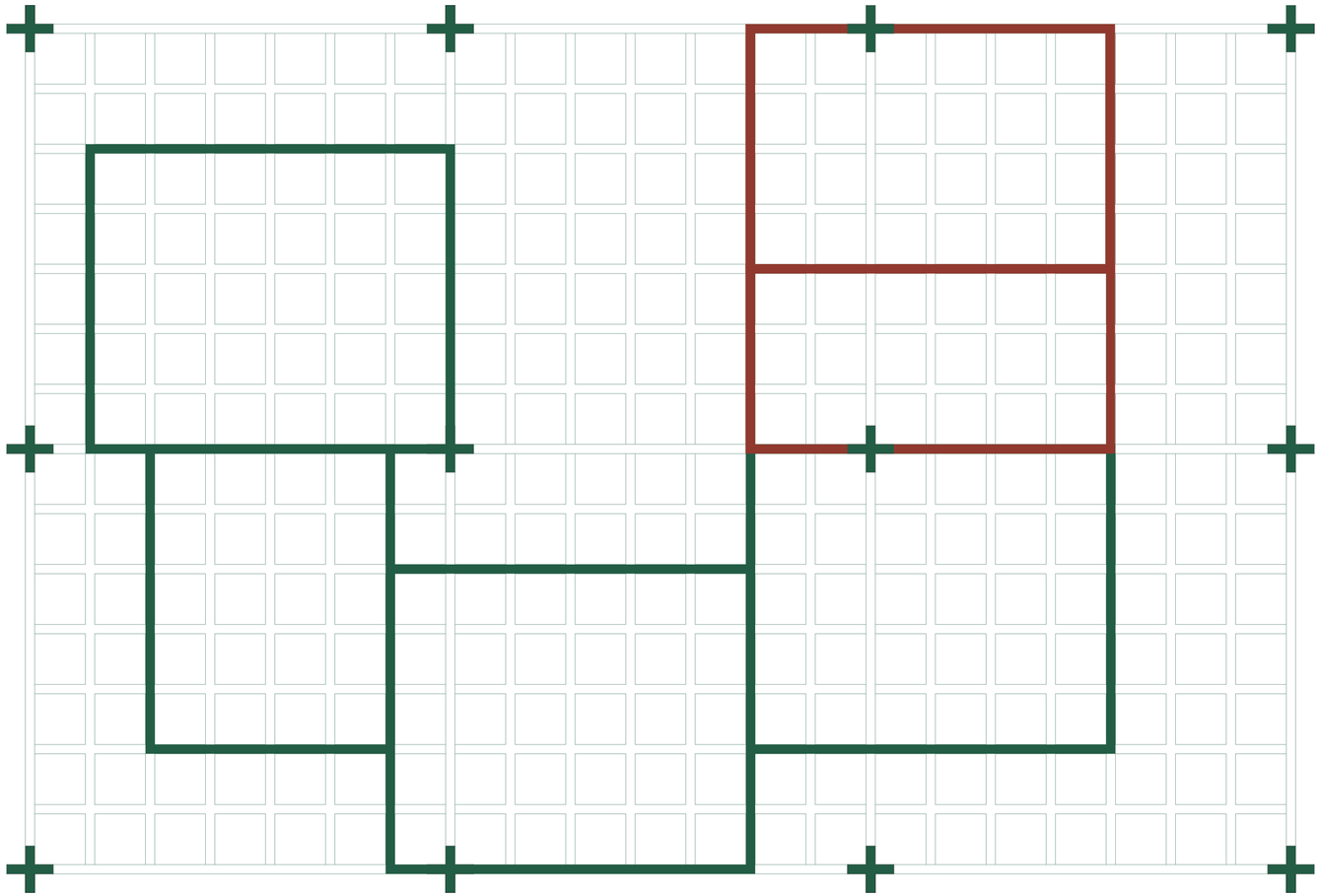
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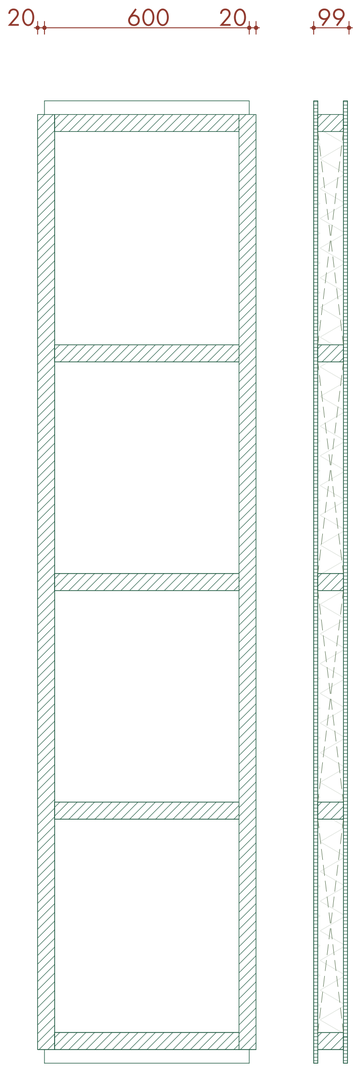
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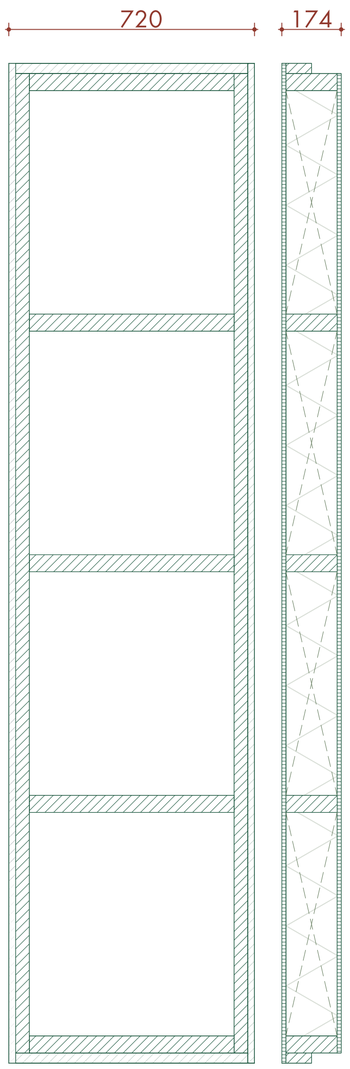
Building system



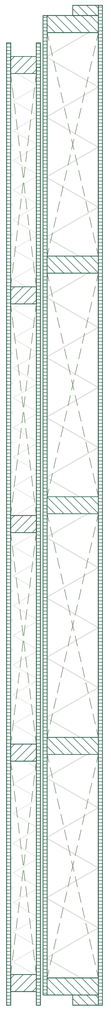
Building system



Interior wall



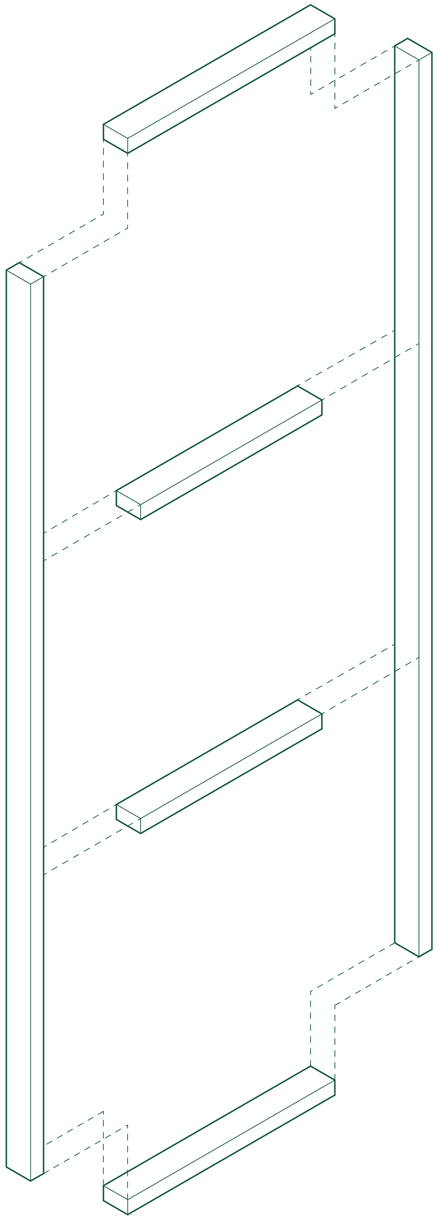
Exterior wall



Wall elements

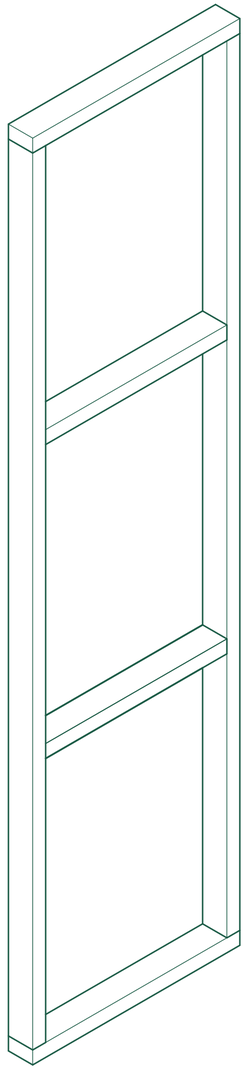


Wall elements



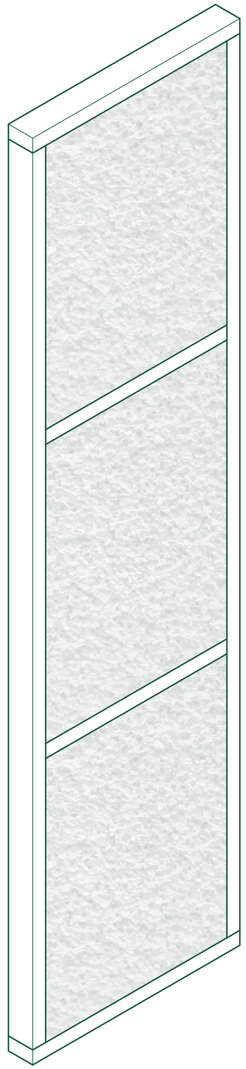


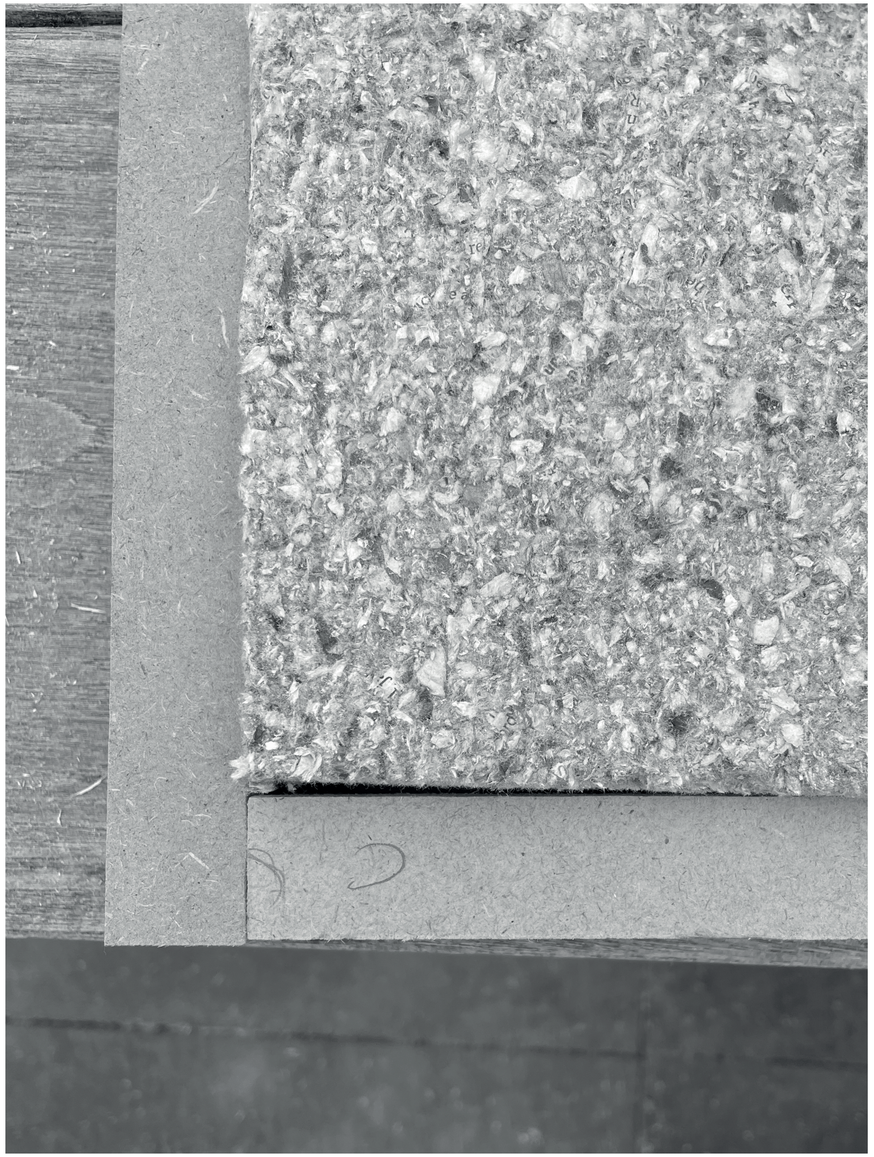
Wall elements



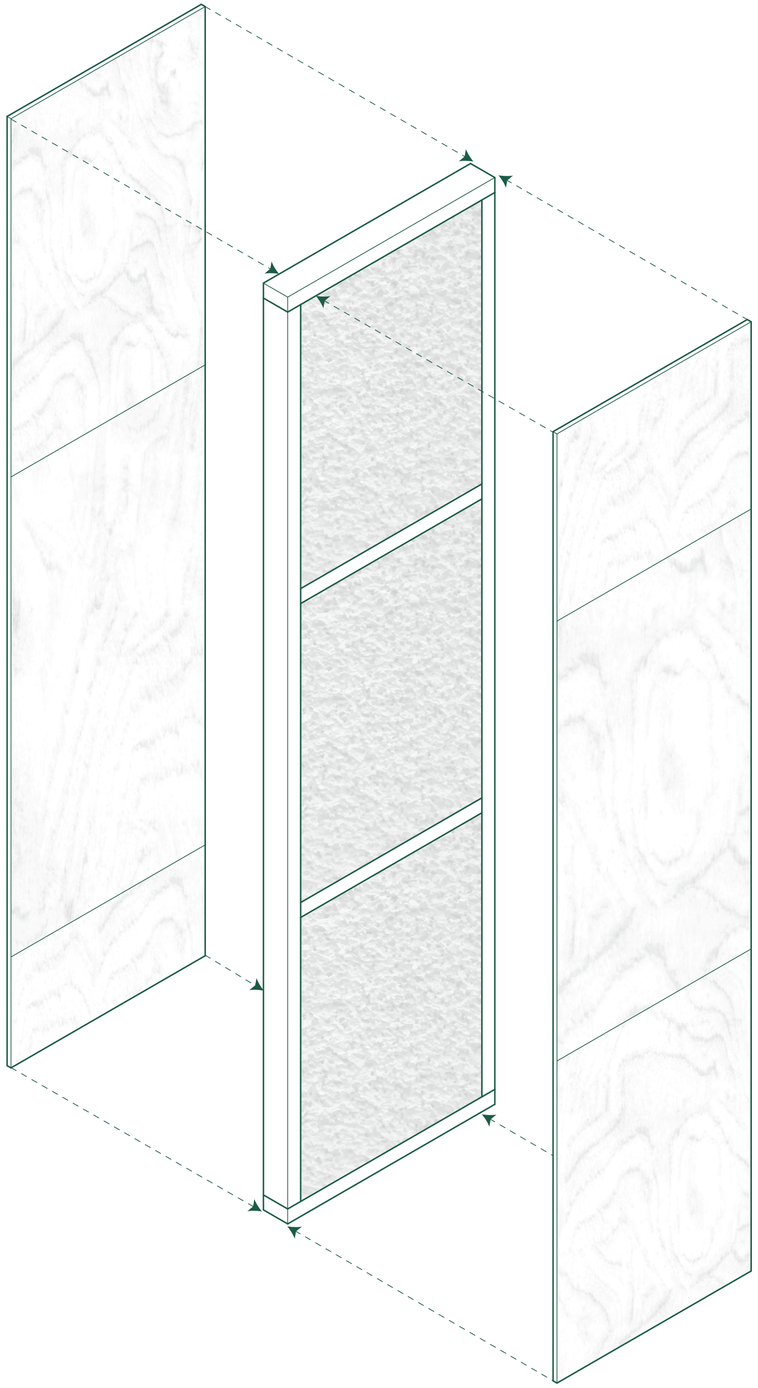


Wall elements



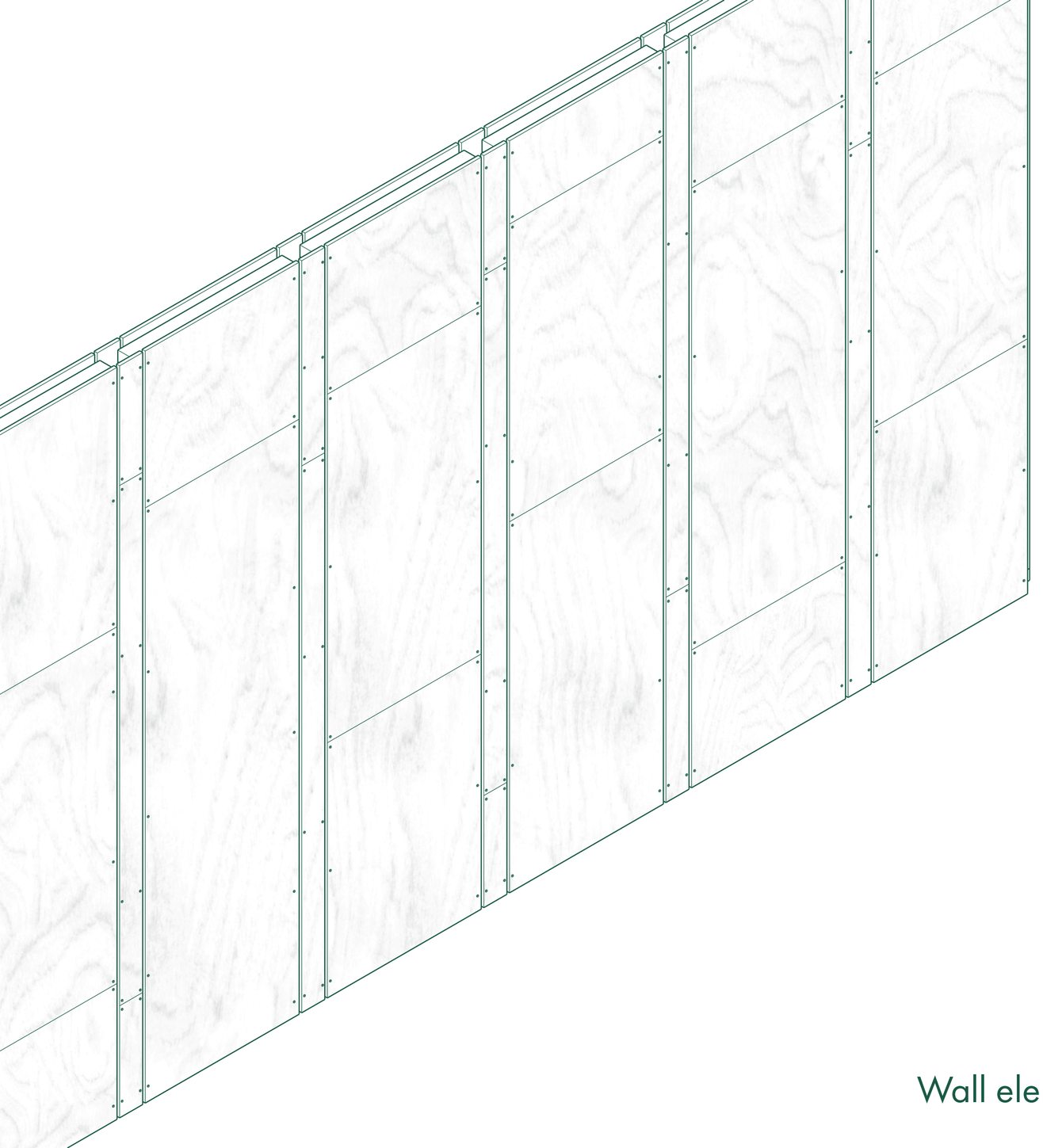


Wall elements



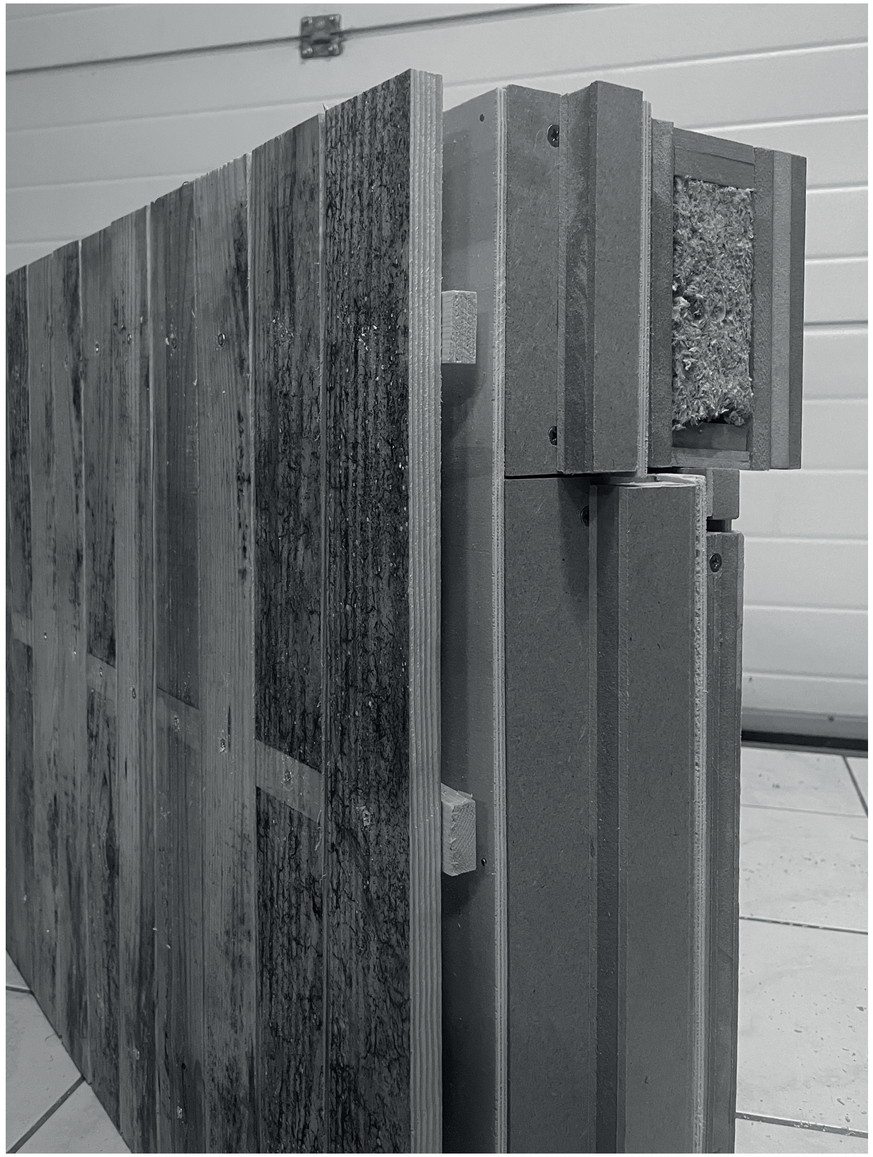


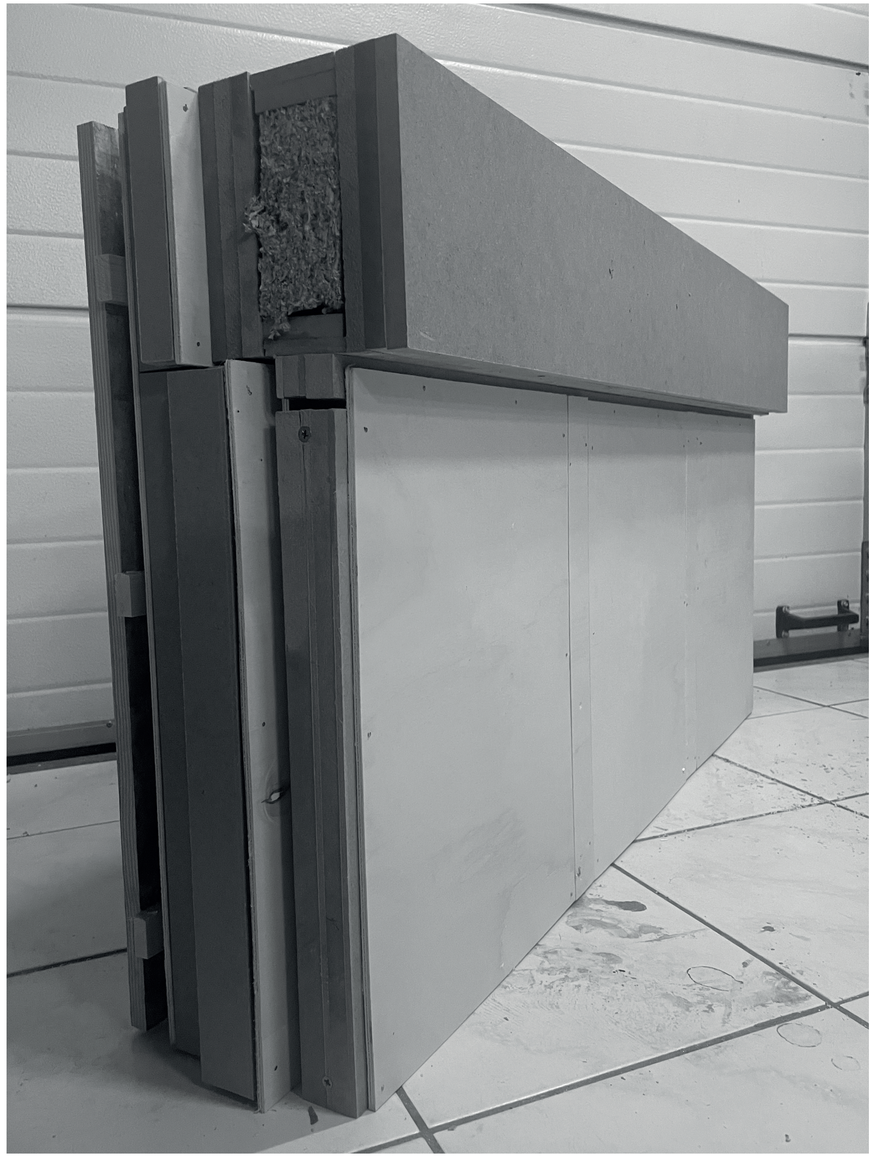
Wall elements

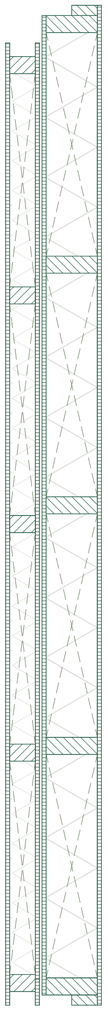




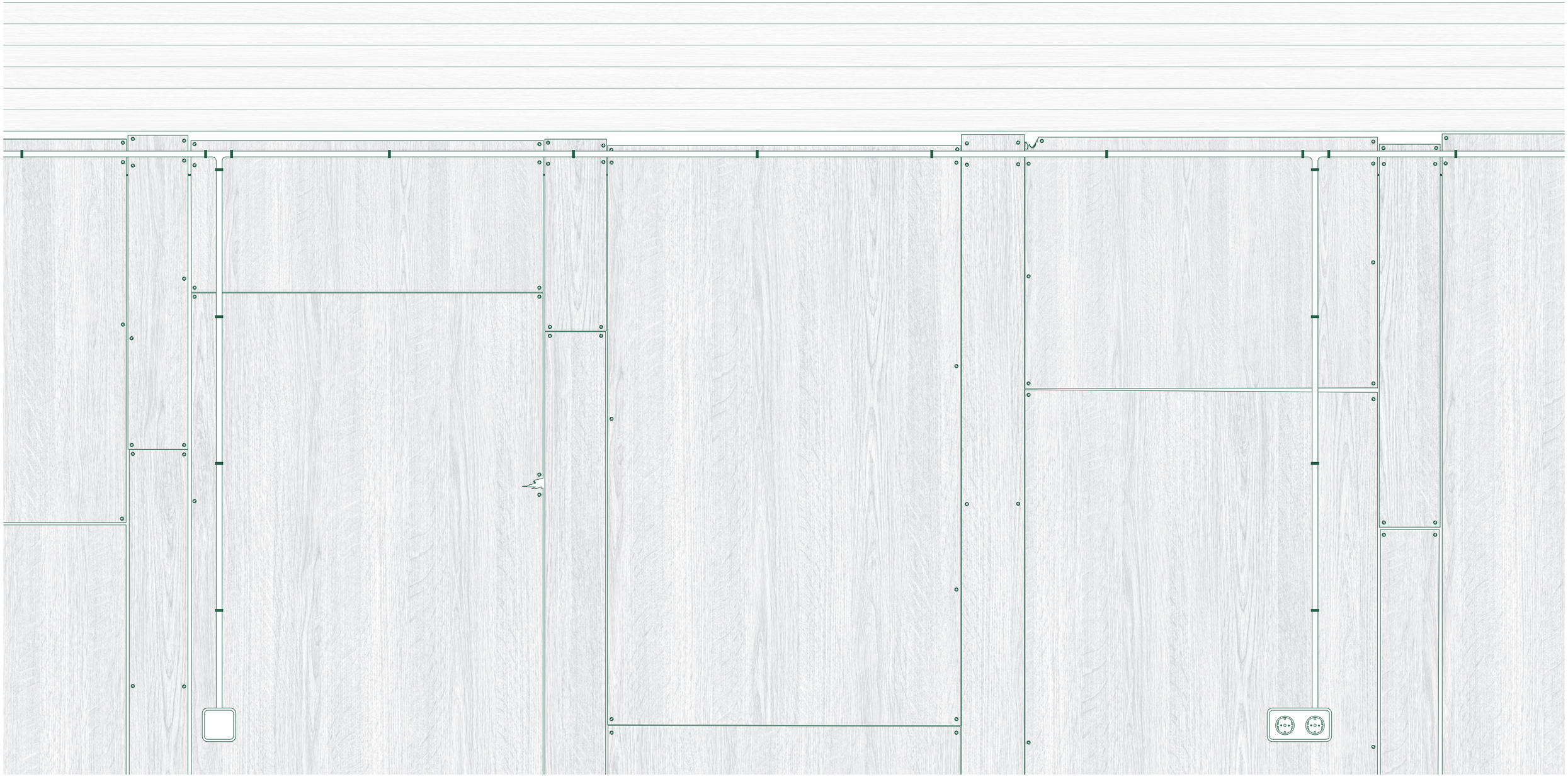
Wall elements



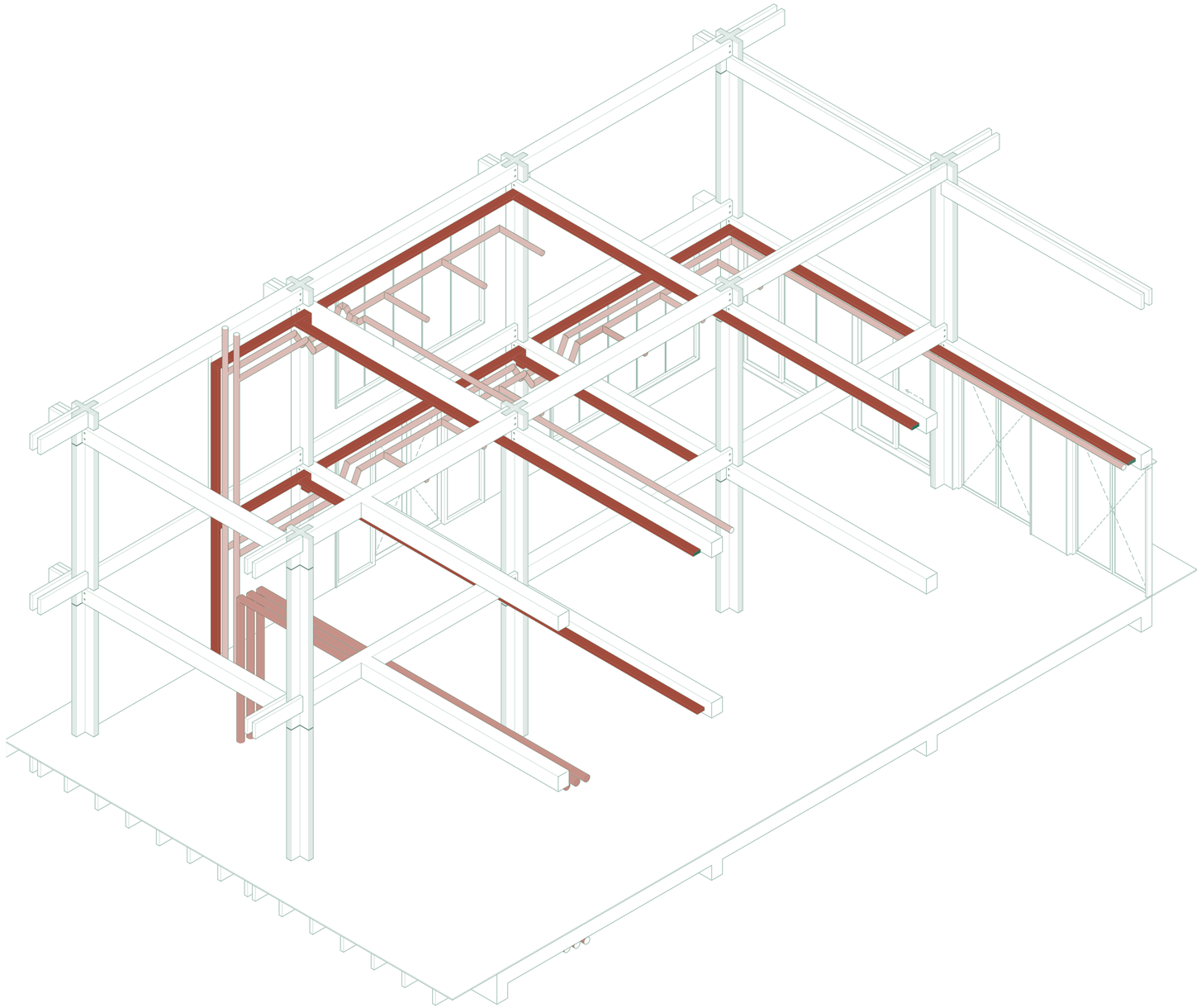




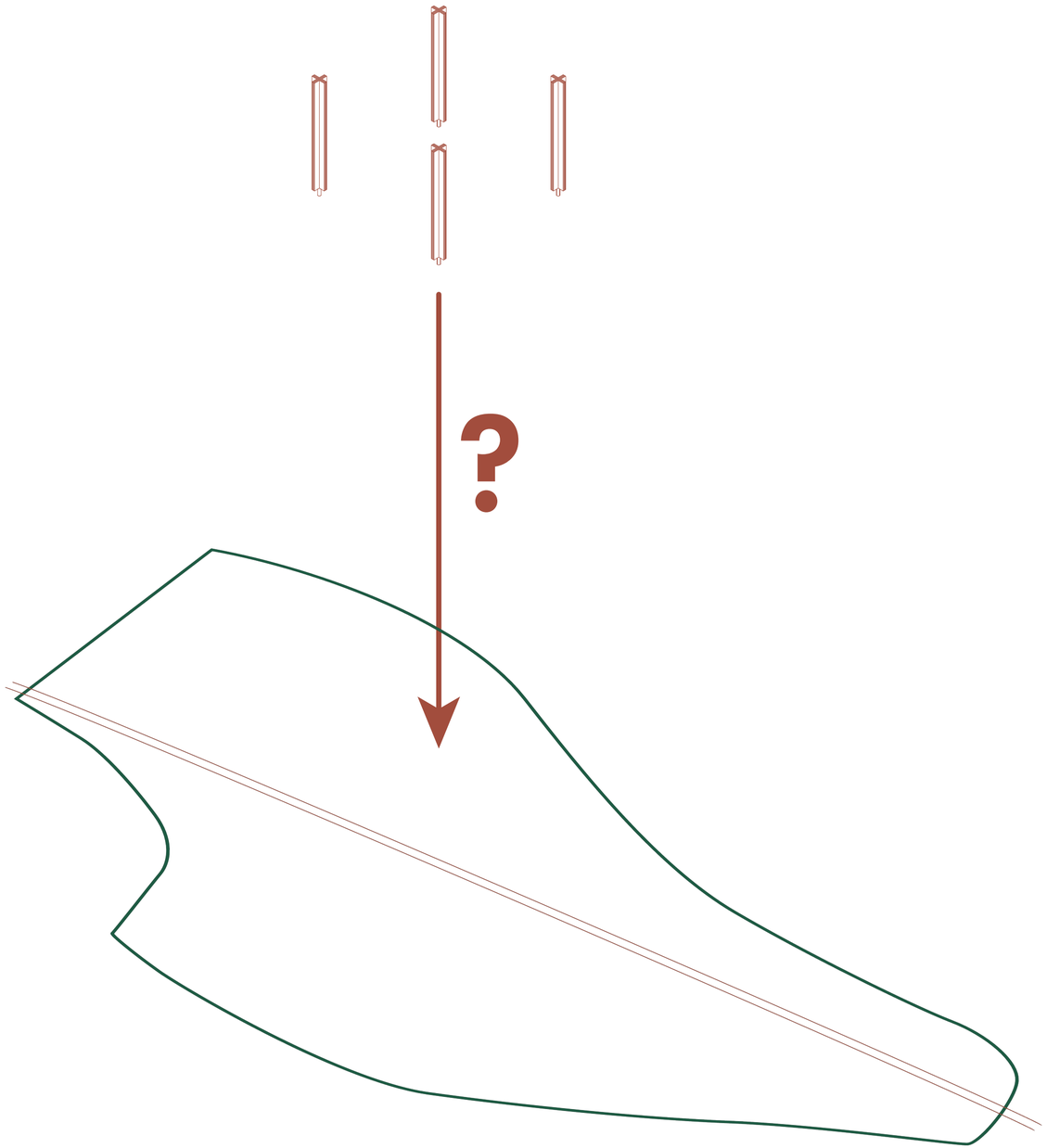
Wall elements



Wall elements



Systems



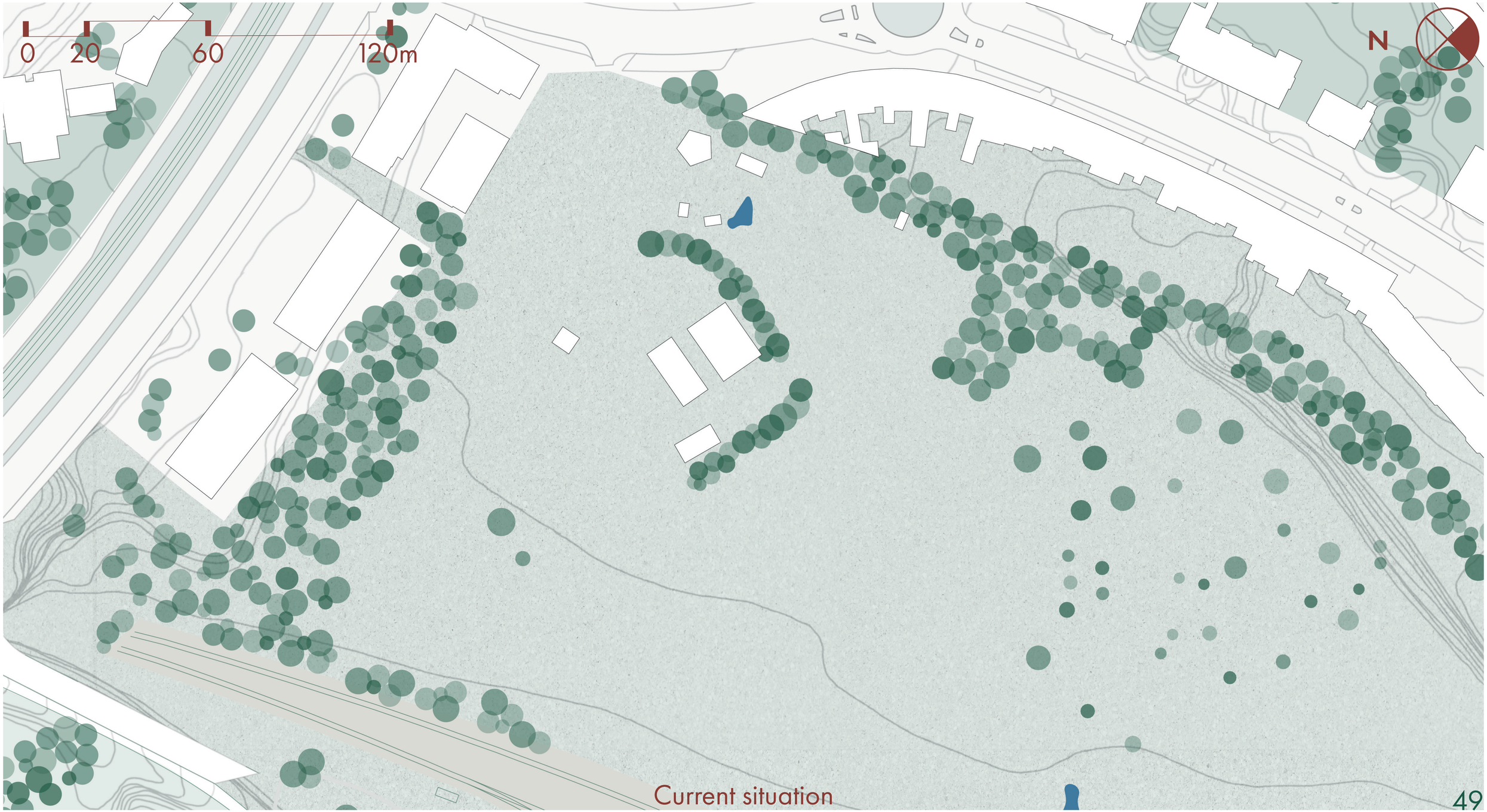
System on the friche



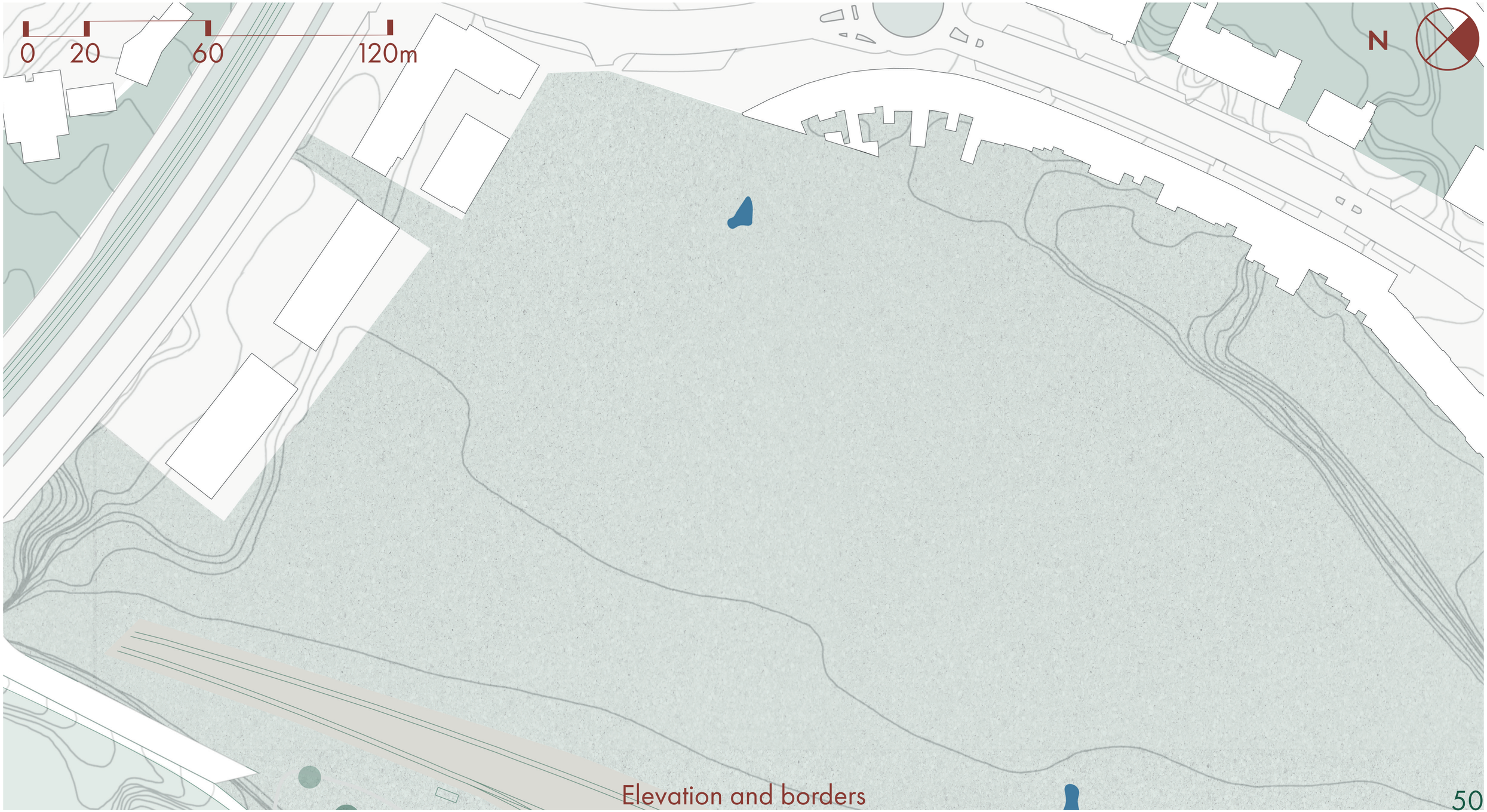
New masterplan



New masterplan



Current situation



Elevation and borders


0
20
60
120m
N
Trees


0
20
60
120m
N
New buildings


0
20
60
120m
N
Wind


0
20
60
120m
N
Outline community


0
20
60
120m
N
Future growth













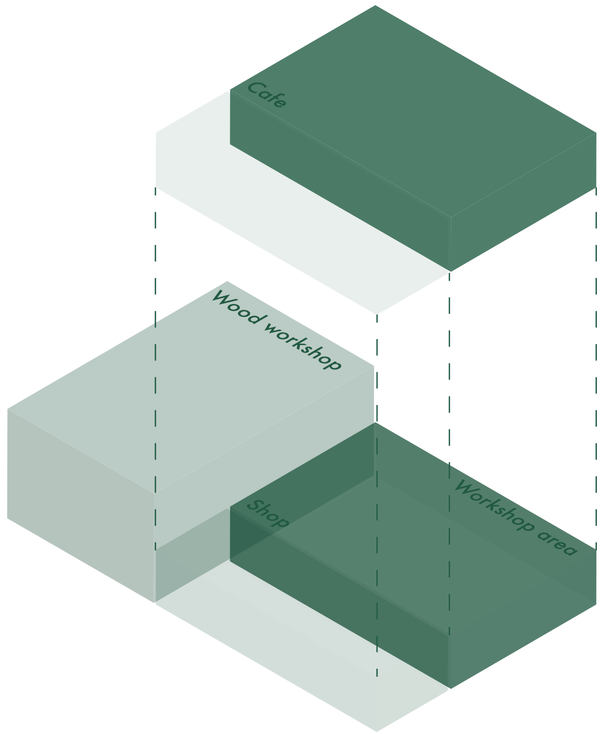
Current community



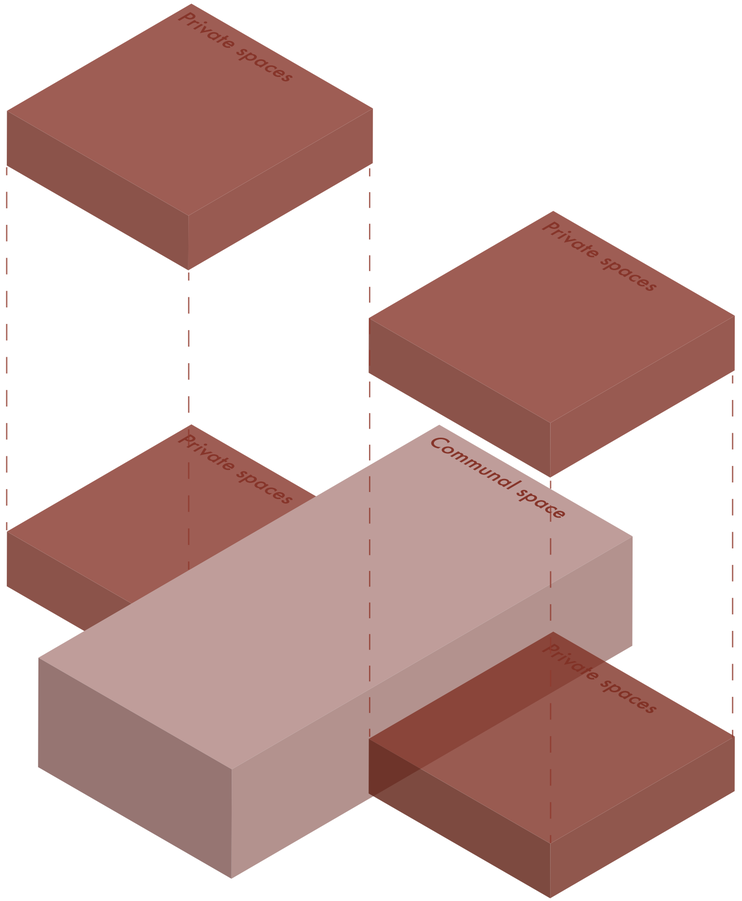




Public building

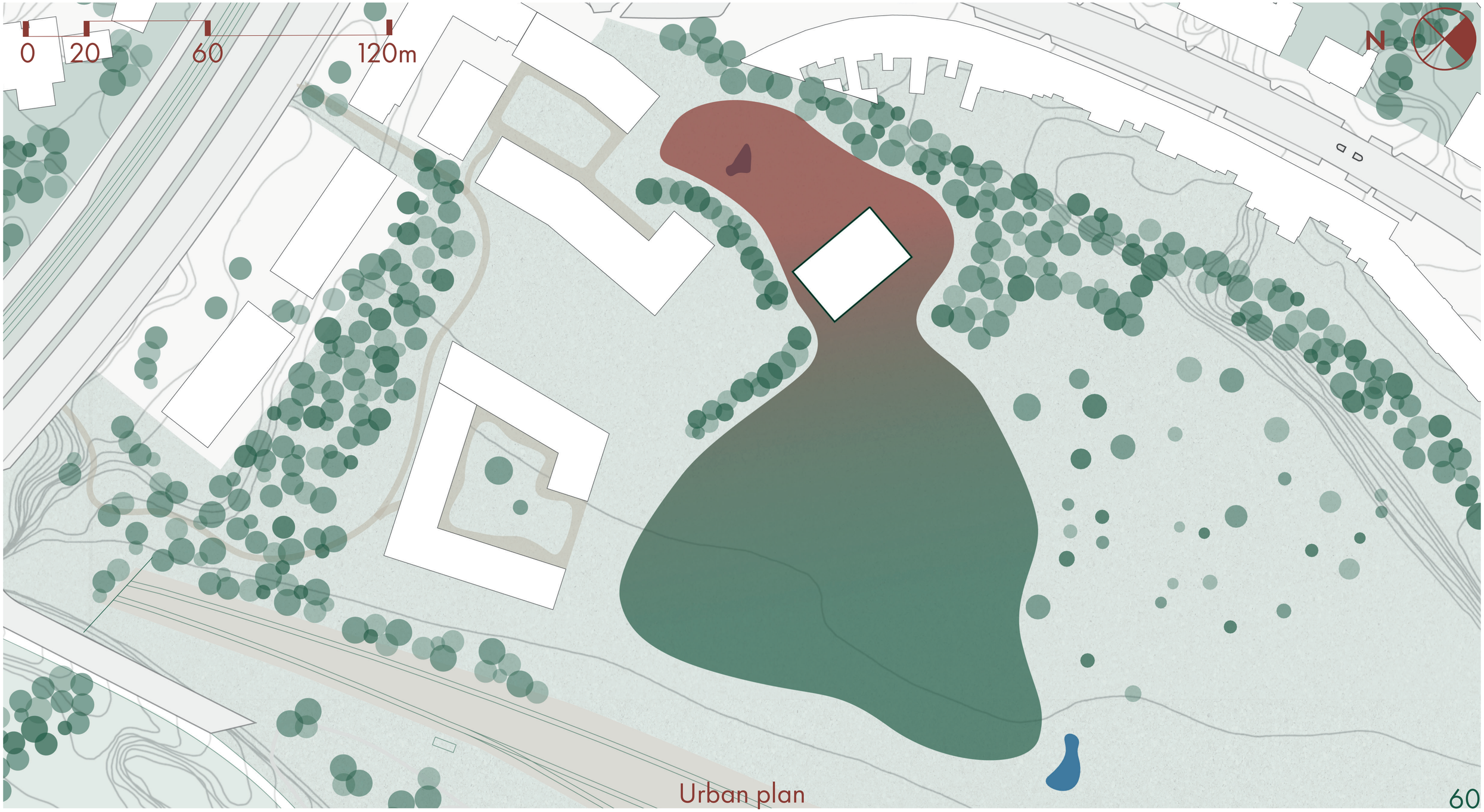


Dwellings

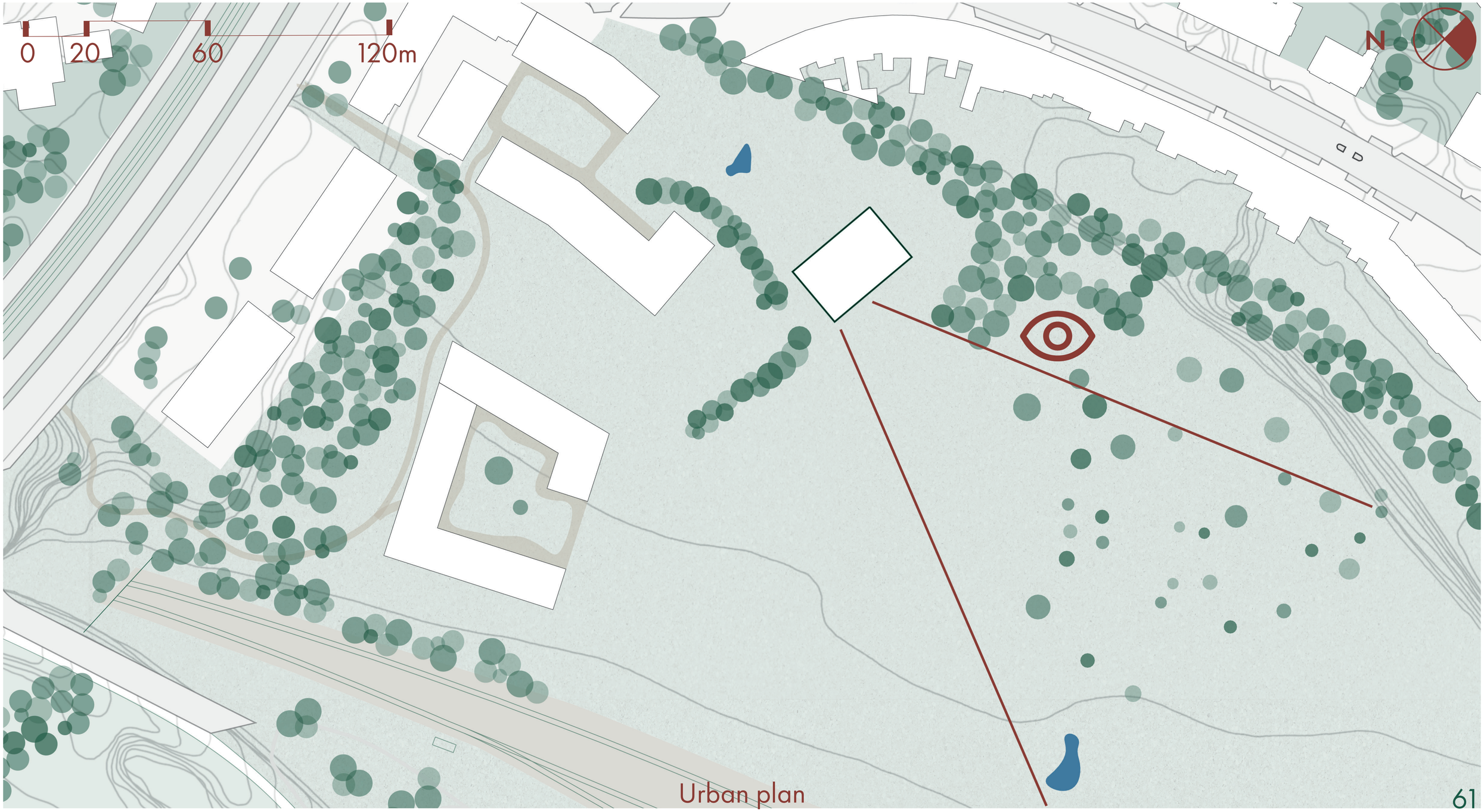




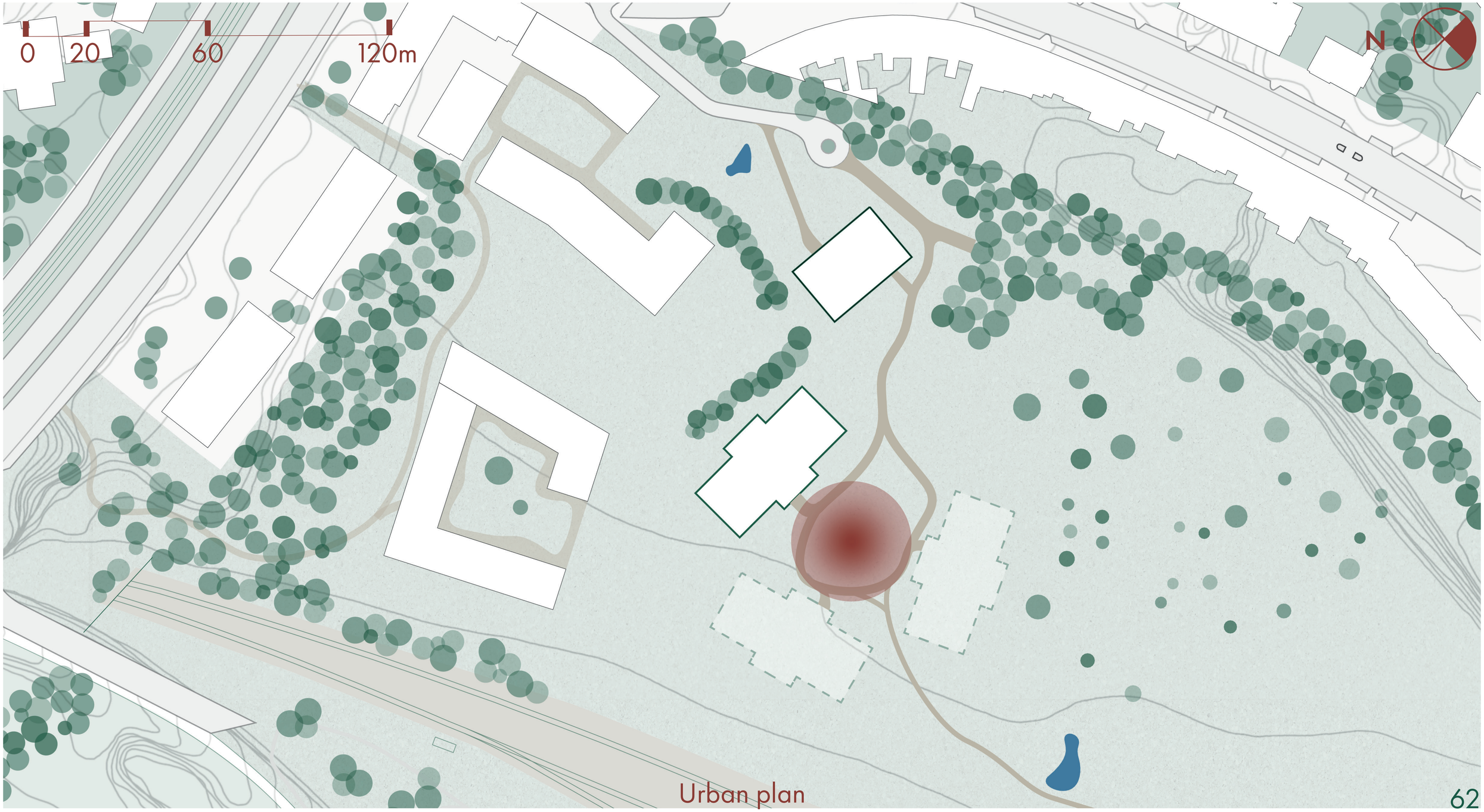
Urban plan



Urban plan



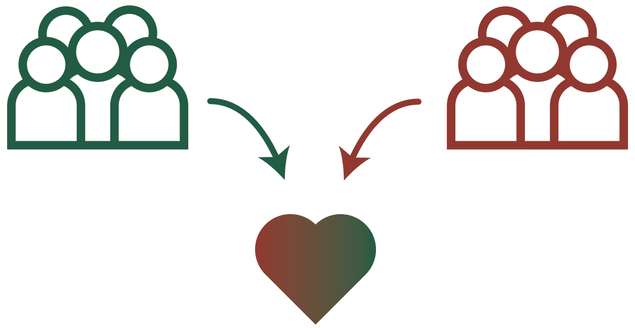
Urban plan



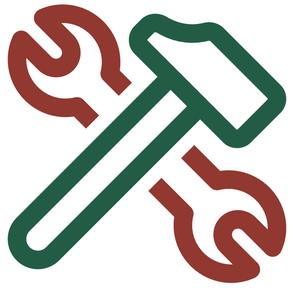
Urban plan



Urban plan



Connecting



Workshop

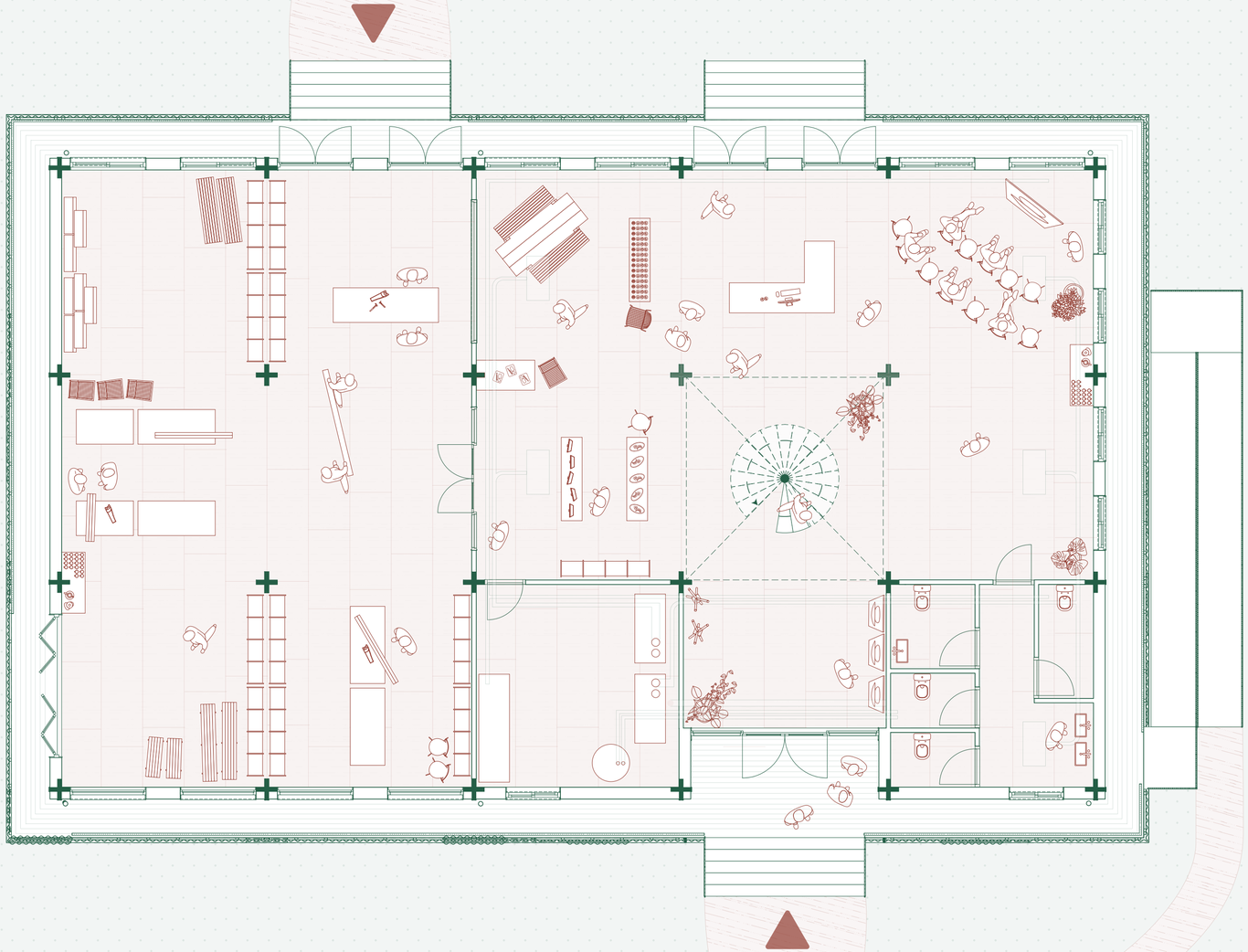


Educating

Public building

Ground floor

0 2 4 8m

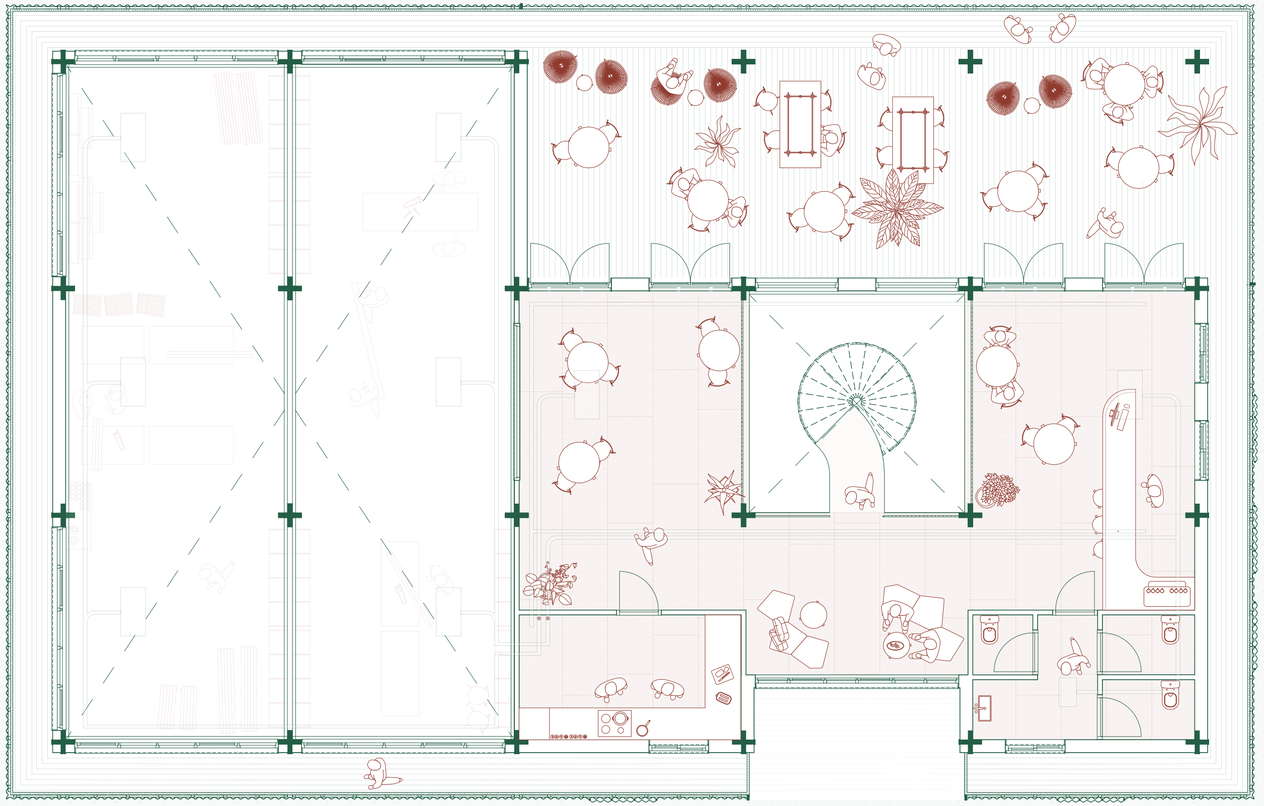




Public building

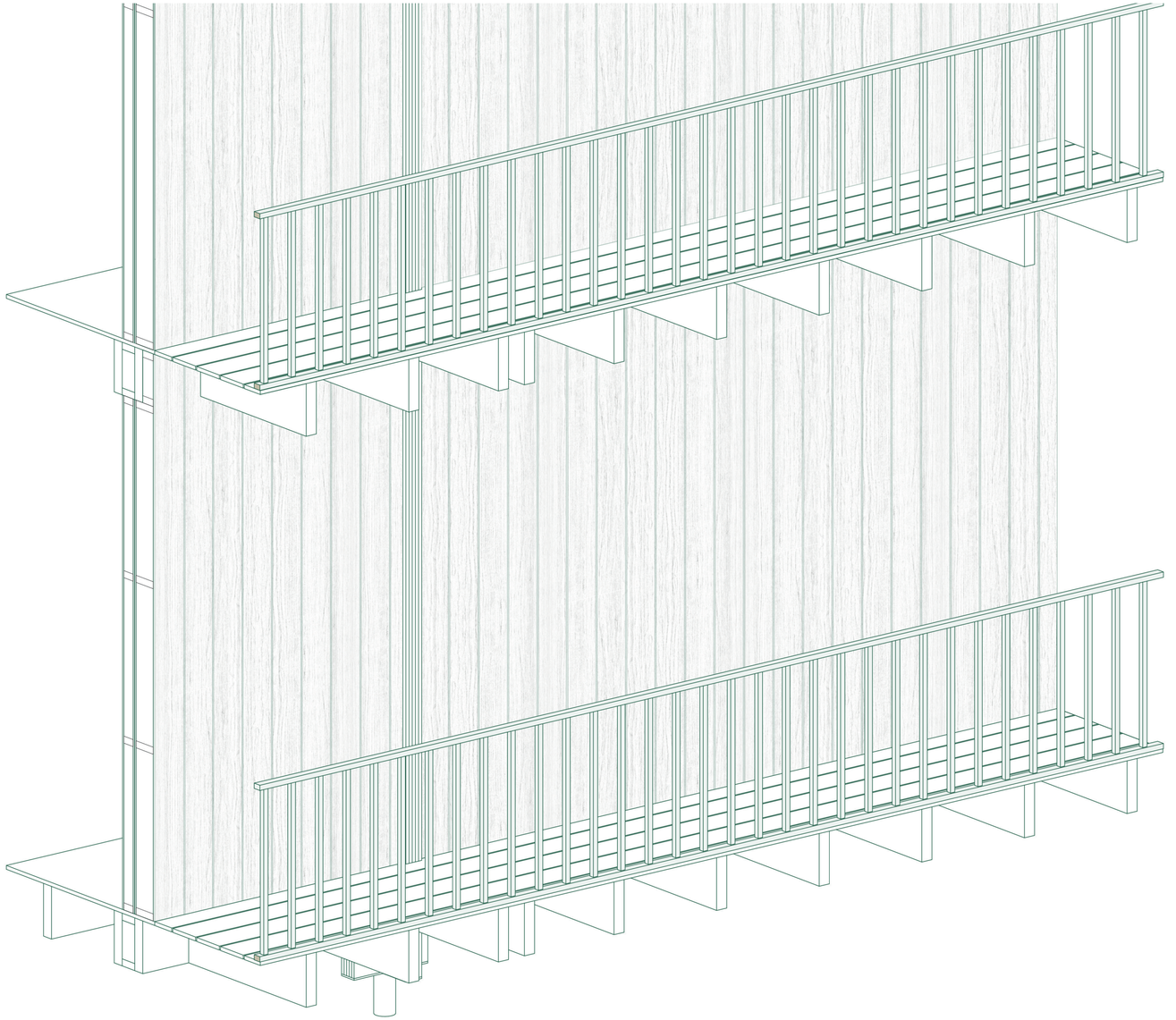
First floor

0 2 4 8m



Public building

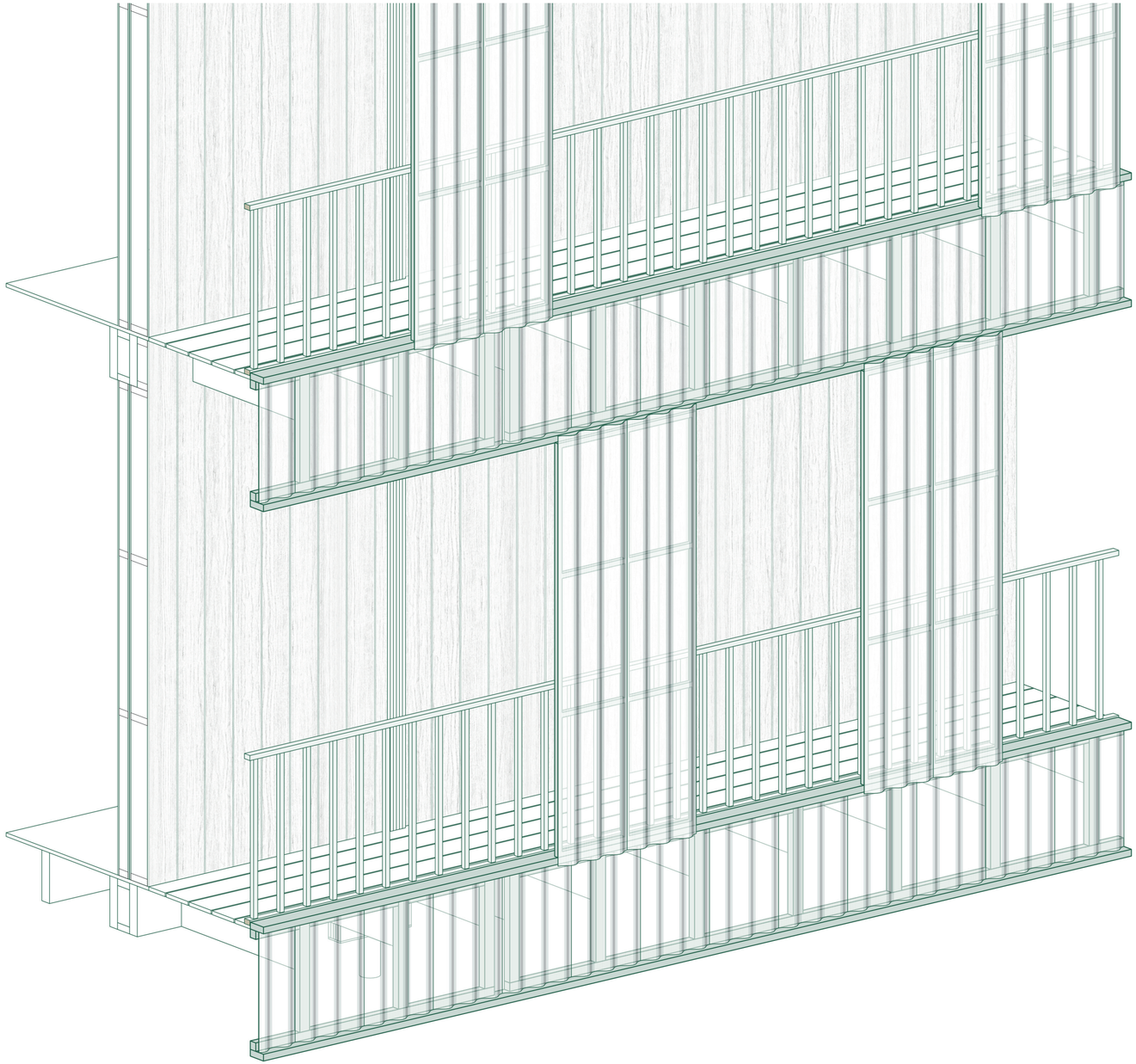
Facade solution



Facade solution



Facade solution

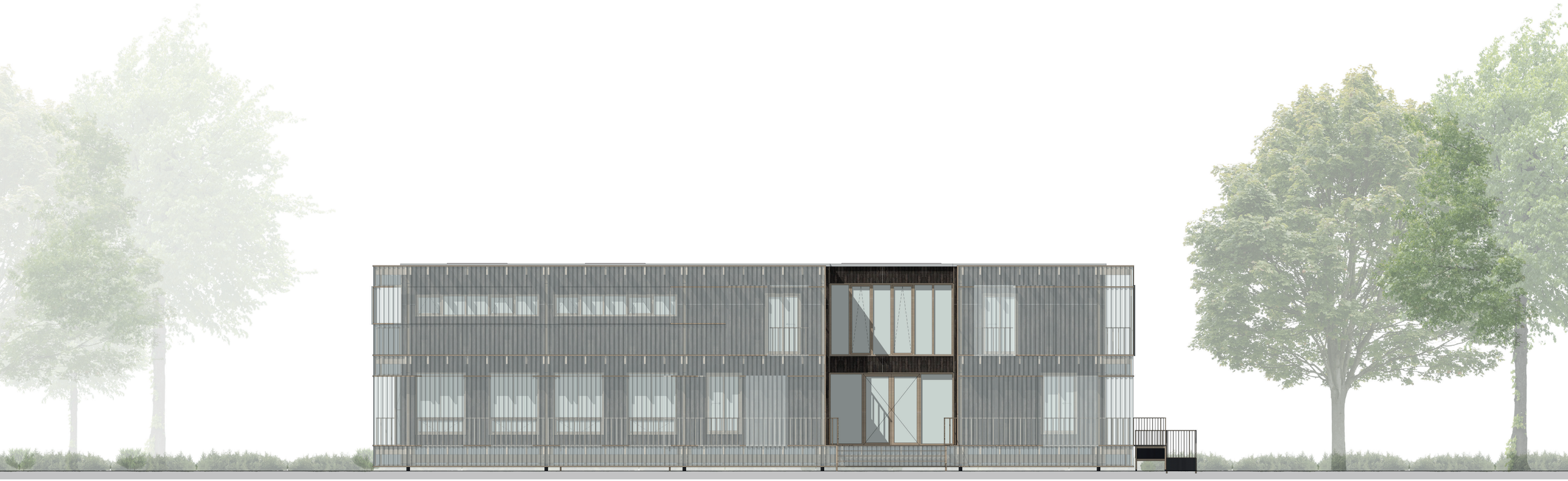




Facade south



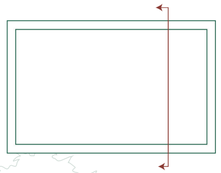
Facade south



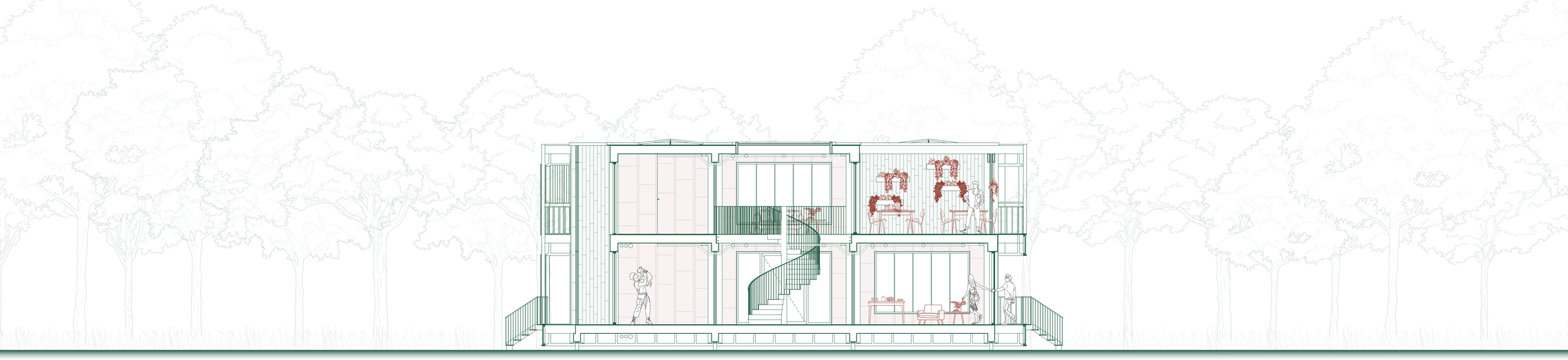
Facade north



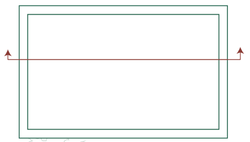
Section A-A



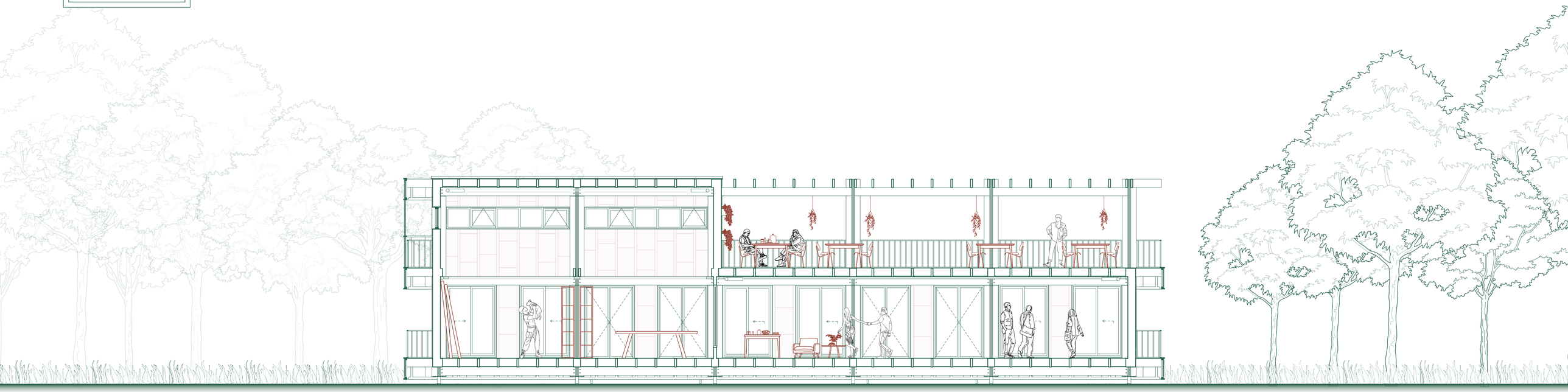
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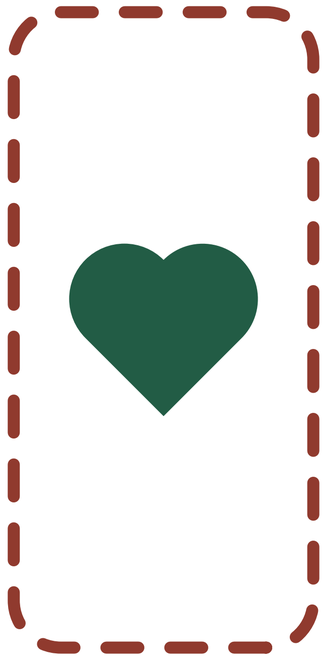


Section B-B

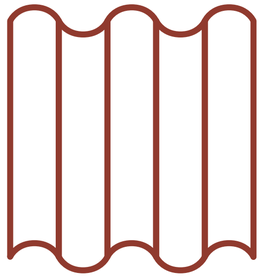


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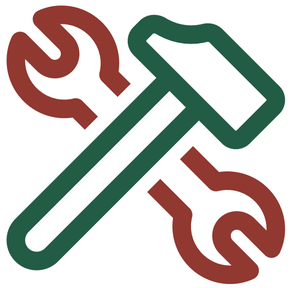


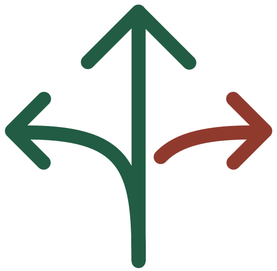
Communal space





Unity & Expression



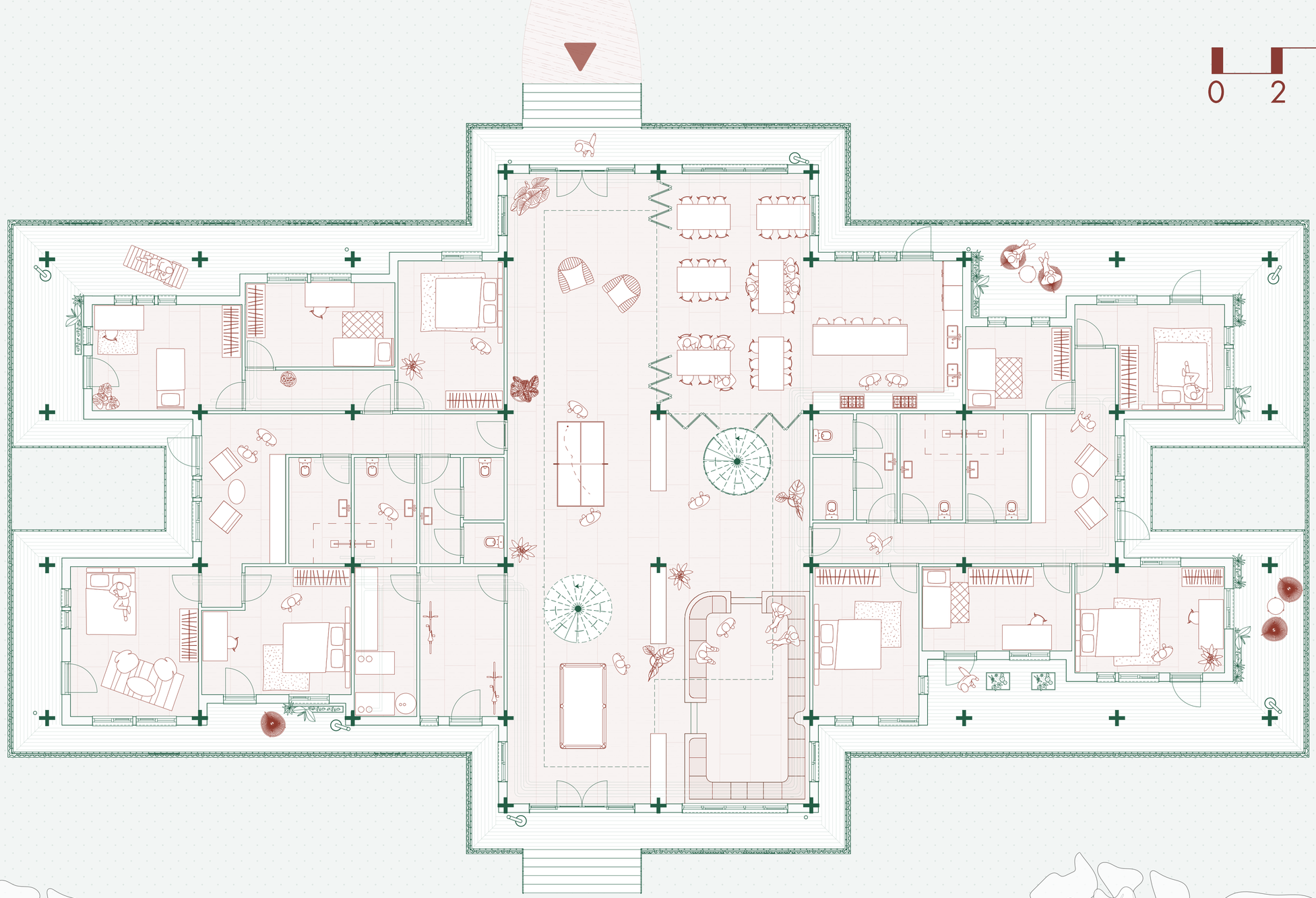


Self building & Expandable



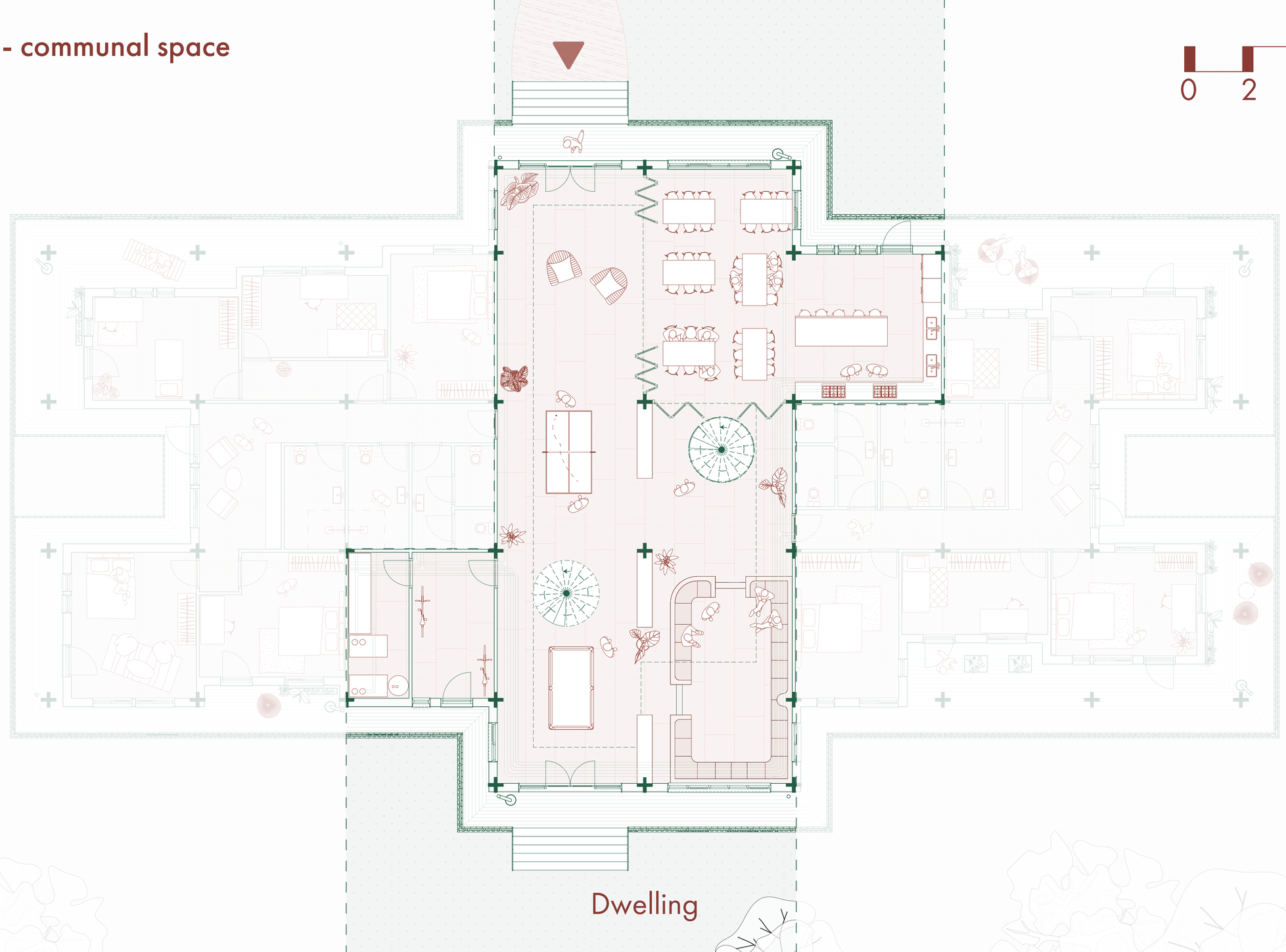
Ground floor

0 2 4 8m

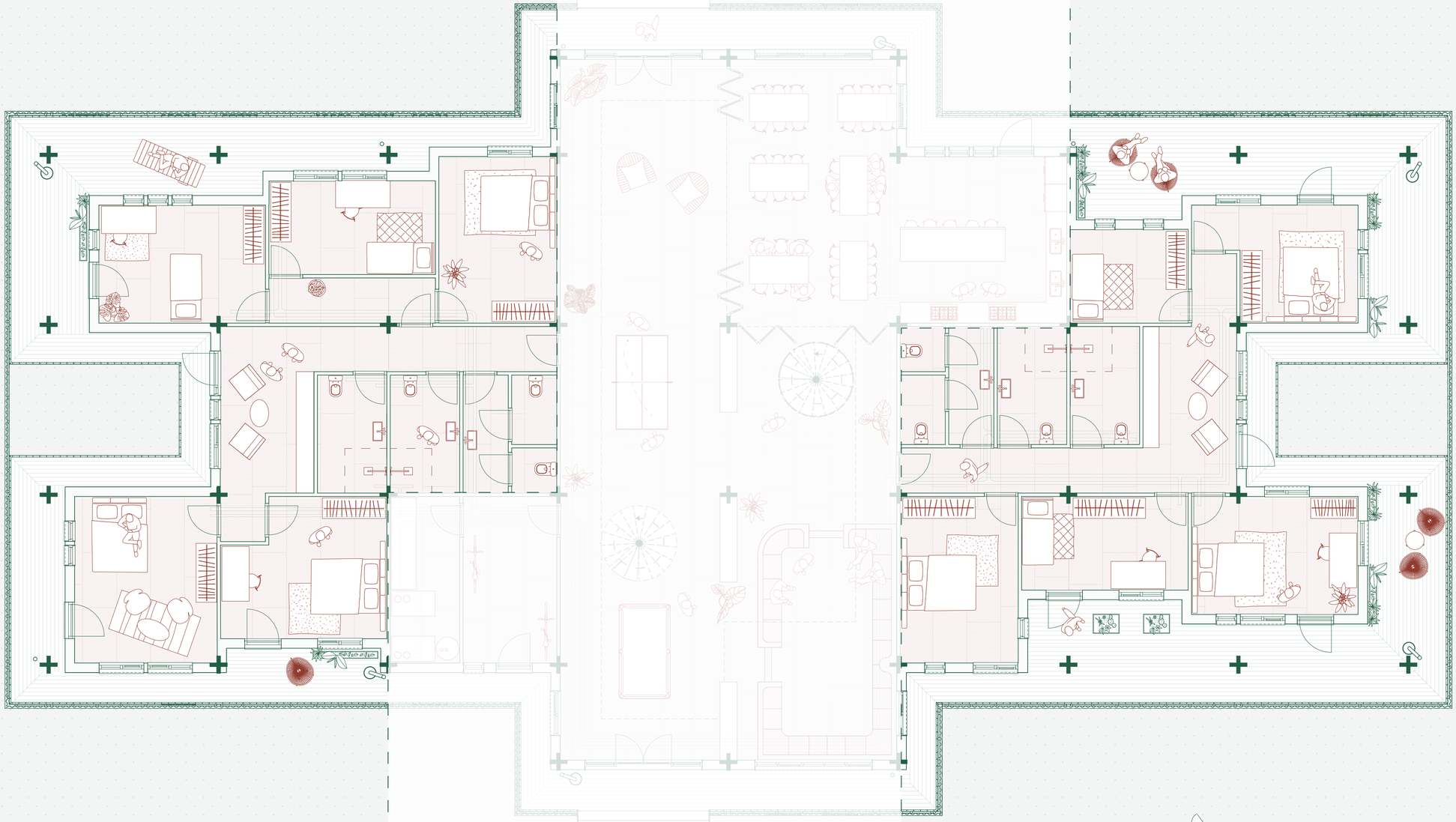


Dwelling

Ground floor - communal space



Ground floor - private spaces

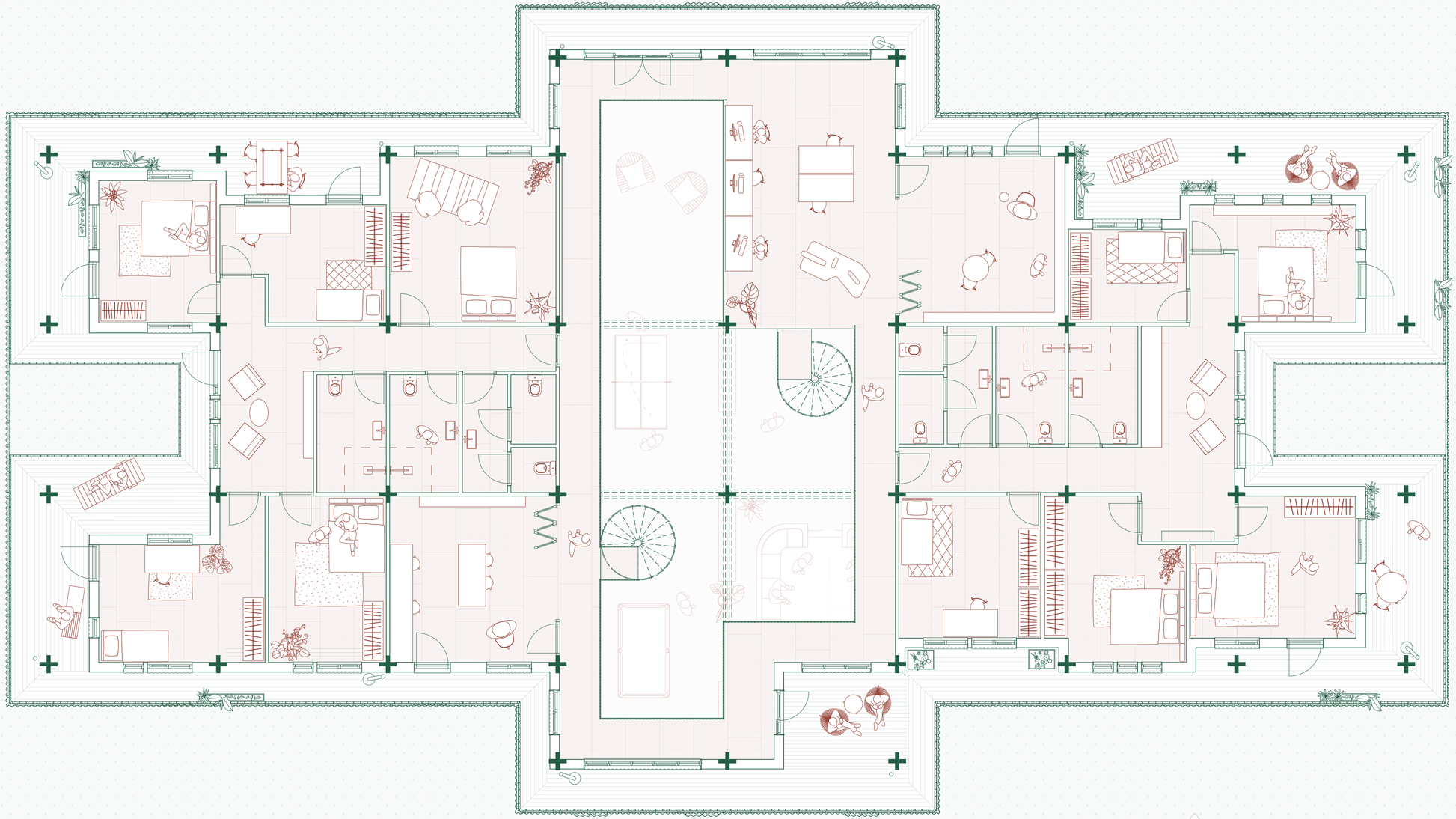


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Dwelling

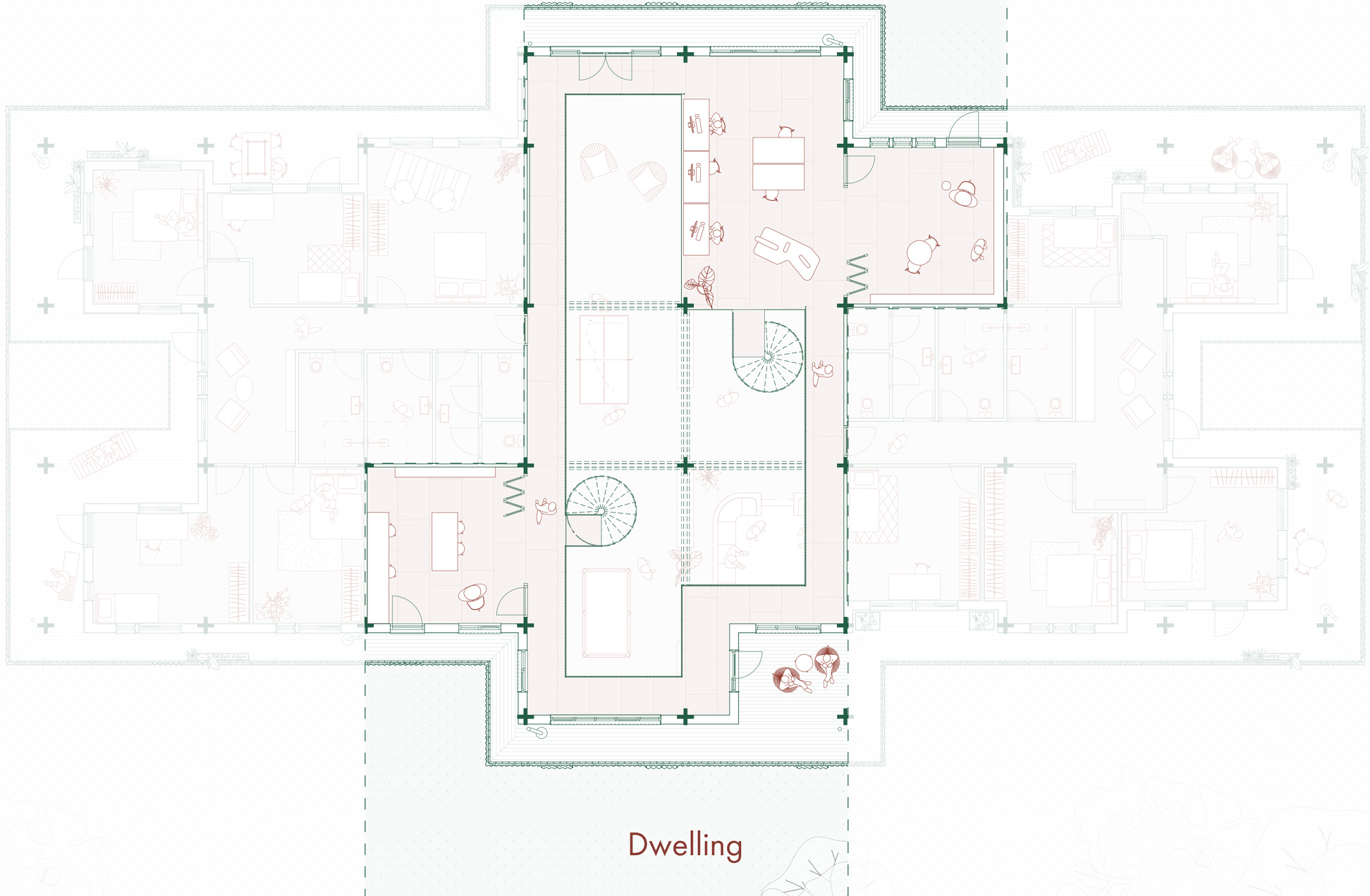
First floor

0 2 4 8m



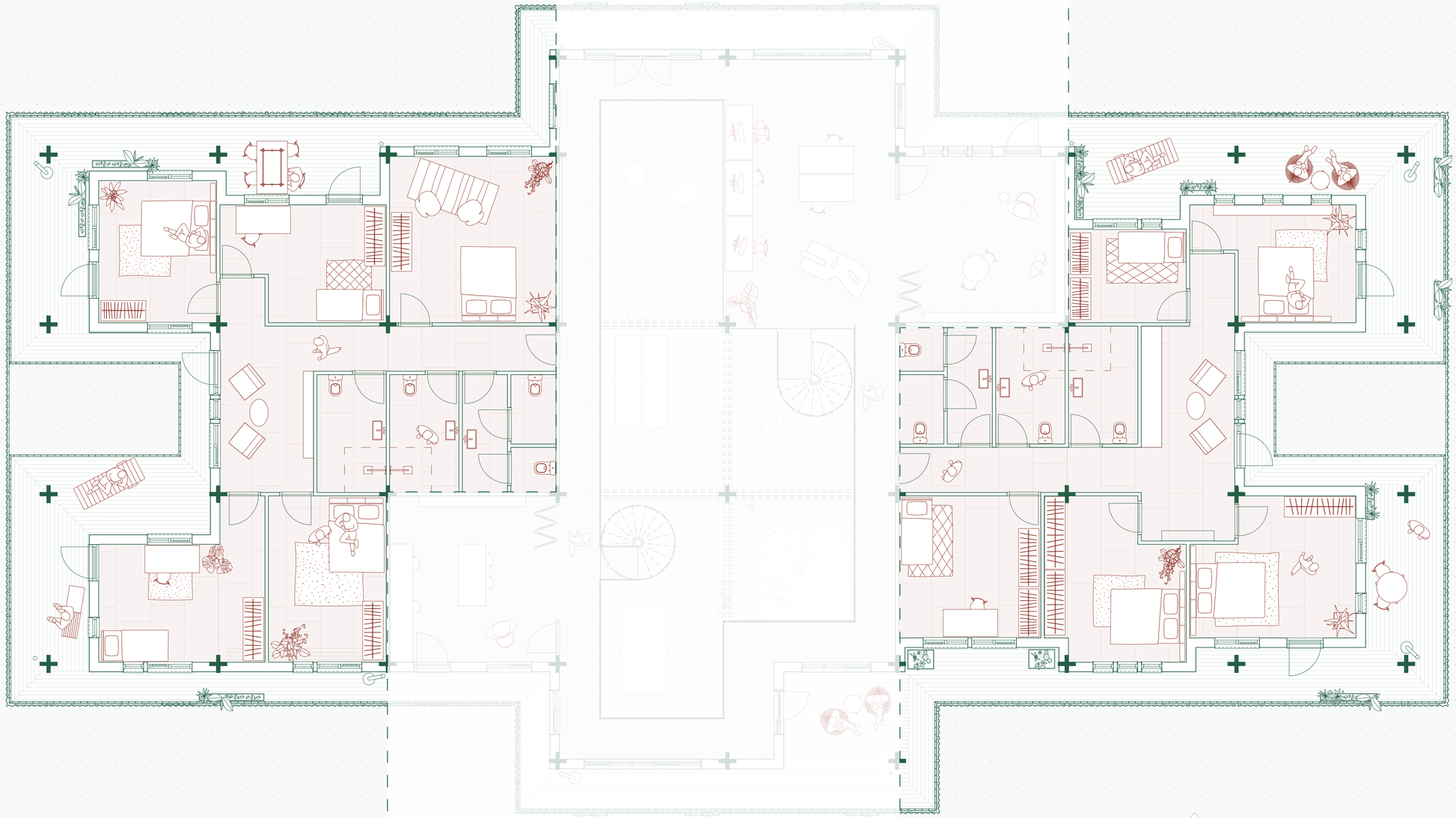
Dwelling

First floor



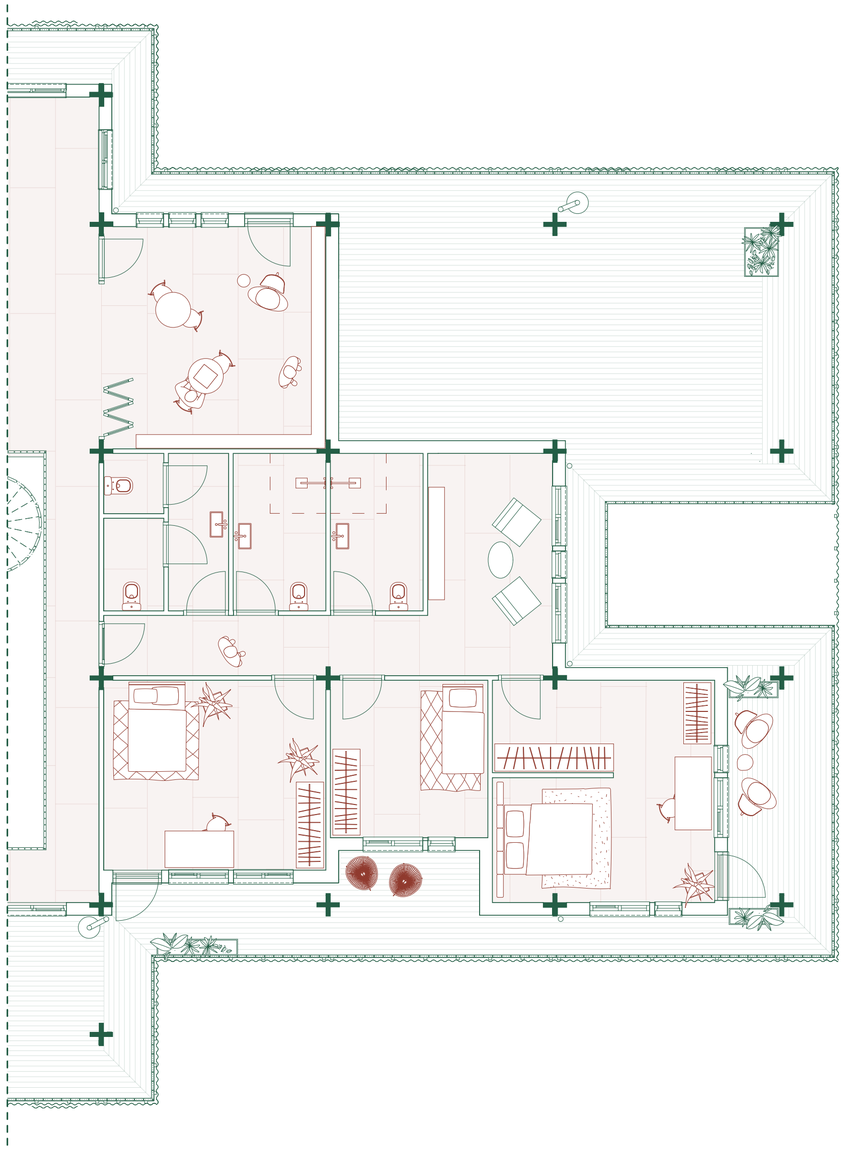
First floor

0 2 4 8m



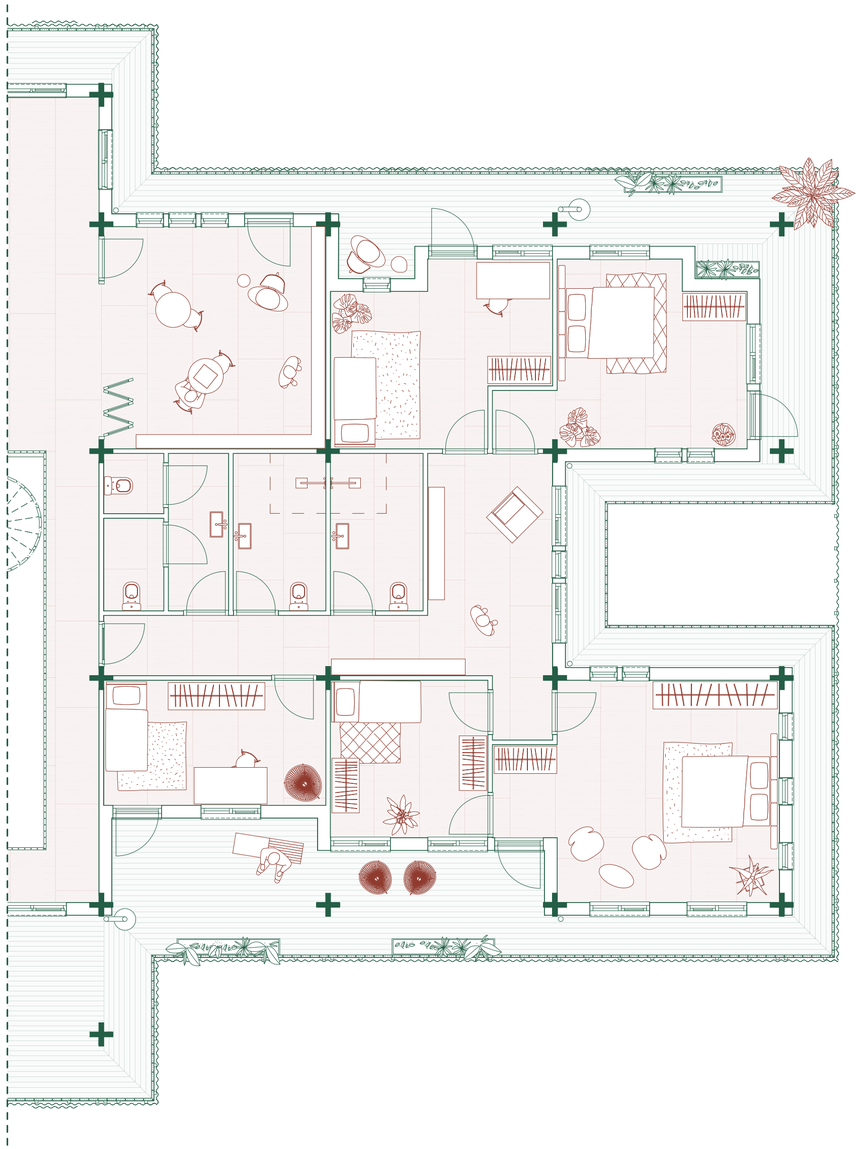
Dwelling

Floor plan alternatives



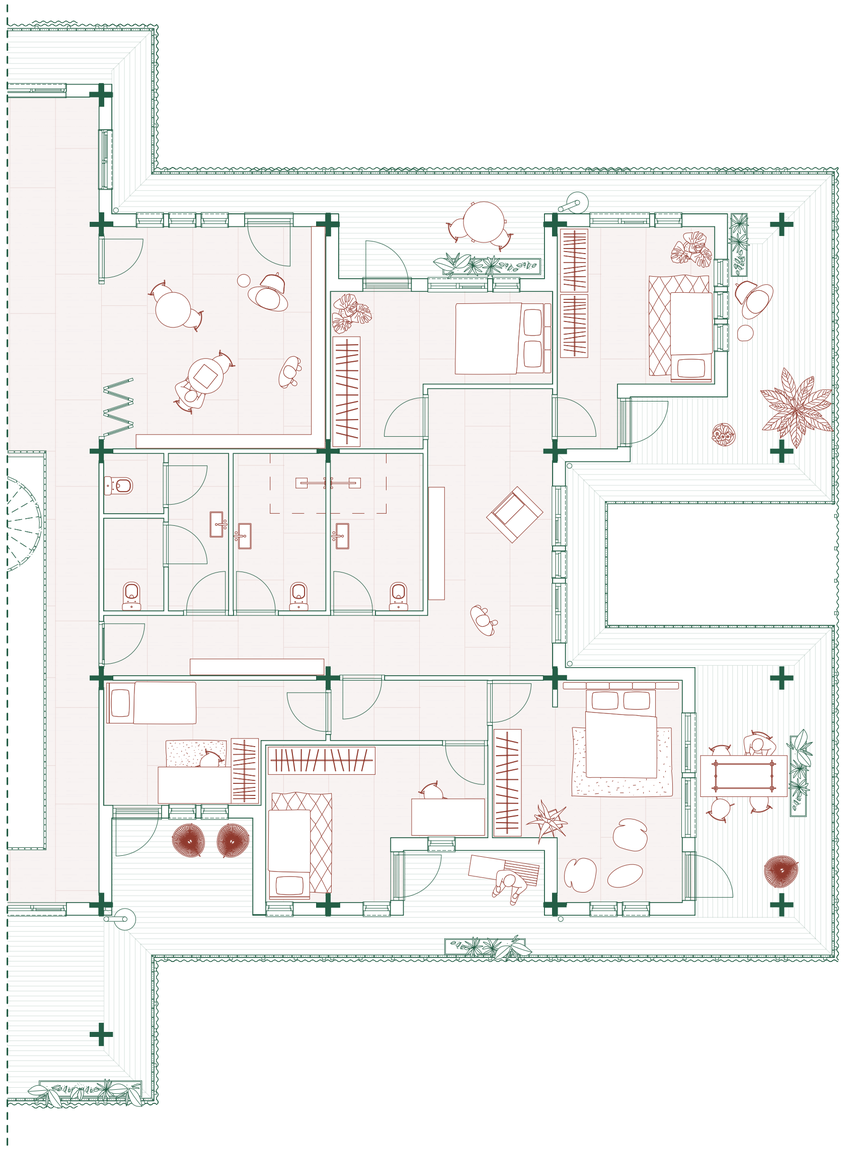
Dwelling

Floor plan alternatives



Dwelling

Floor plan alternatives



Dwelling

Facade north



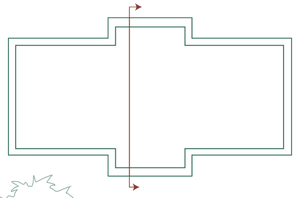
Facade north - alternative



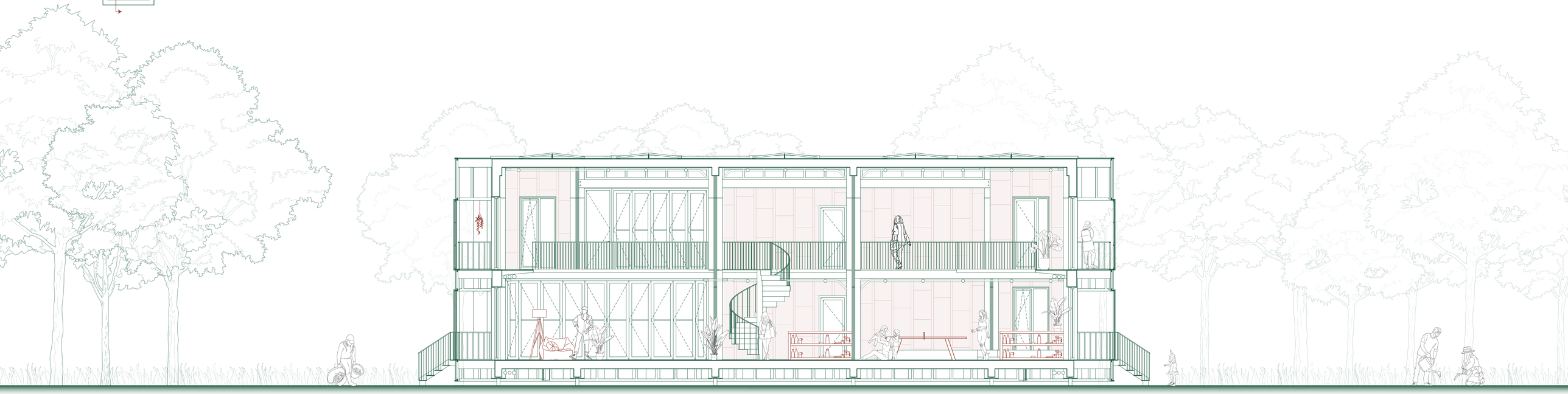
Facade north - alternative



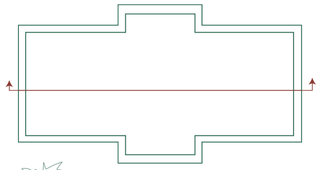
Section A-A



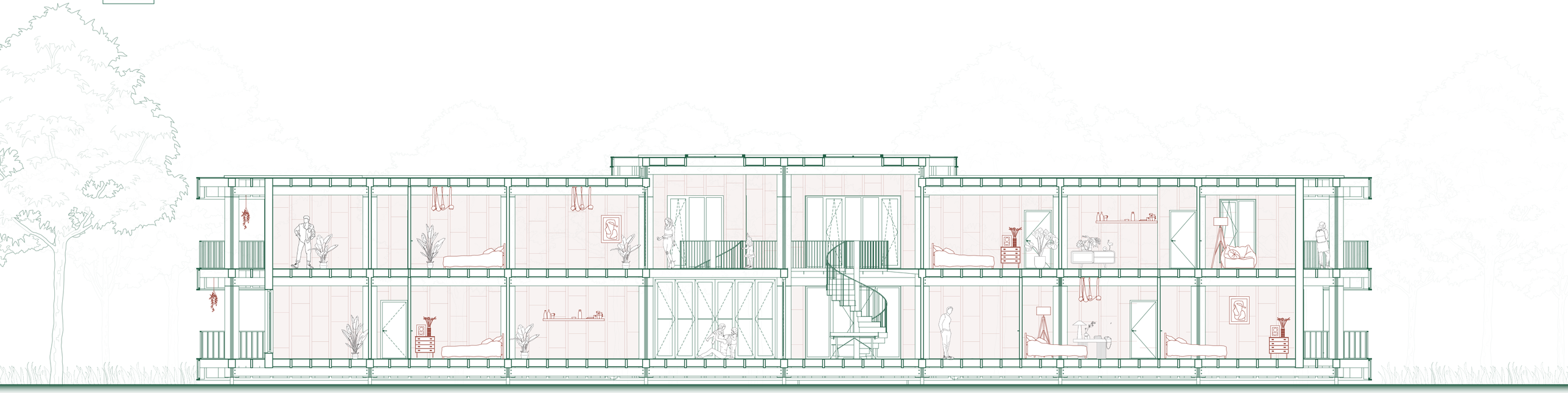
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Section B-B

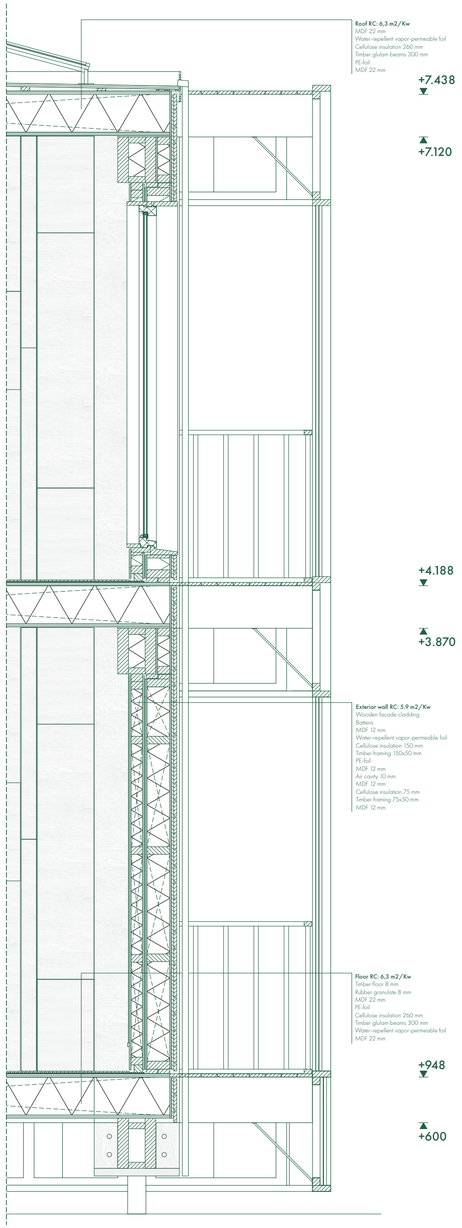


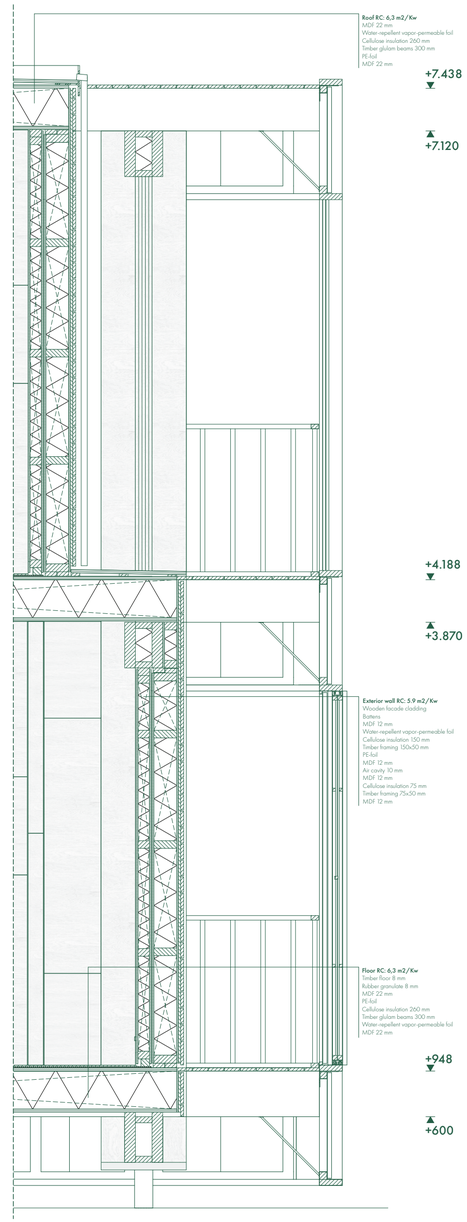
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Section 1:20

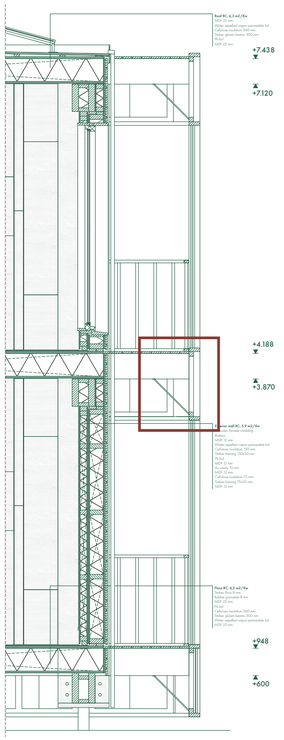


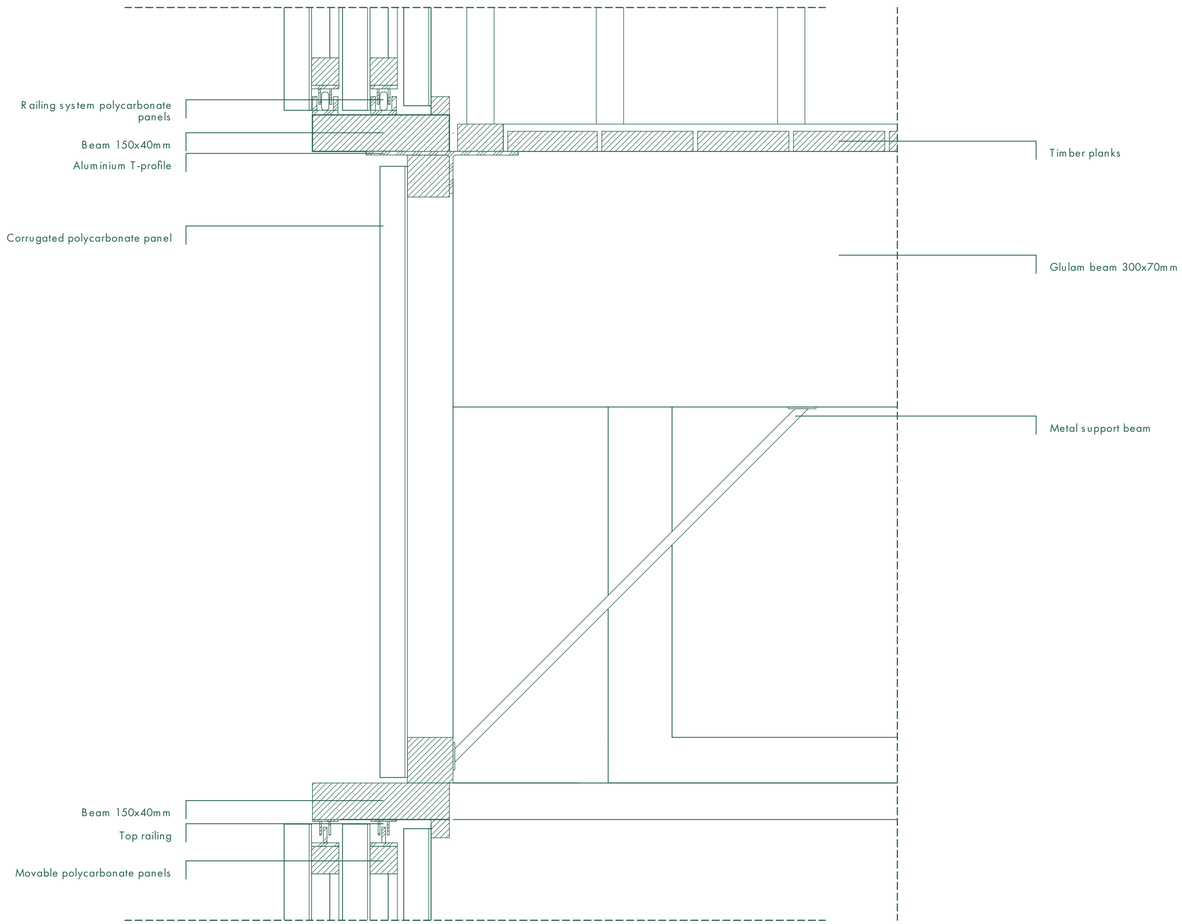




1:20 section

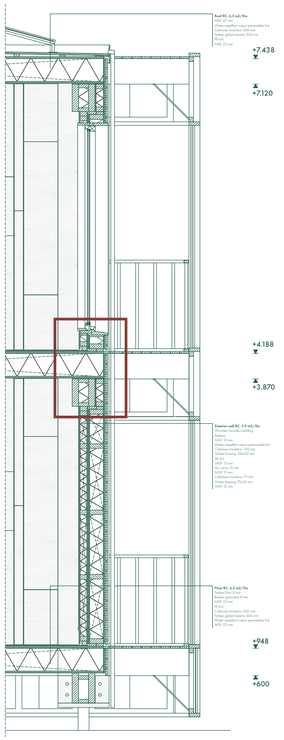
Detail 1

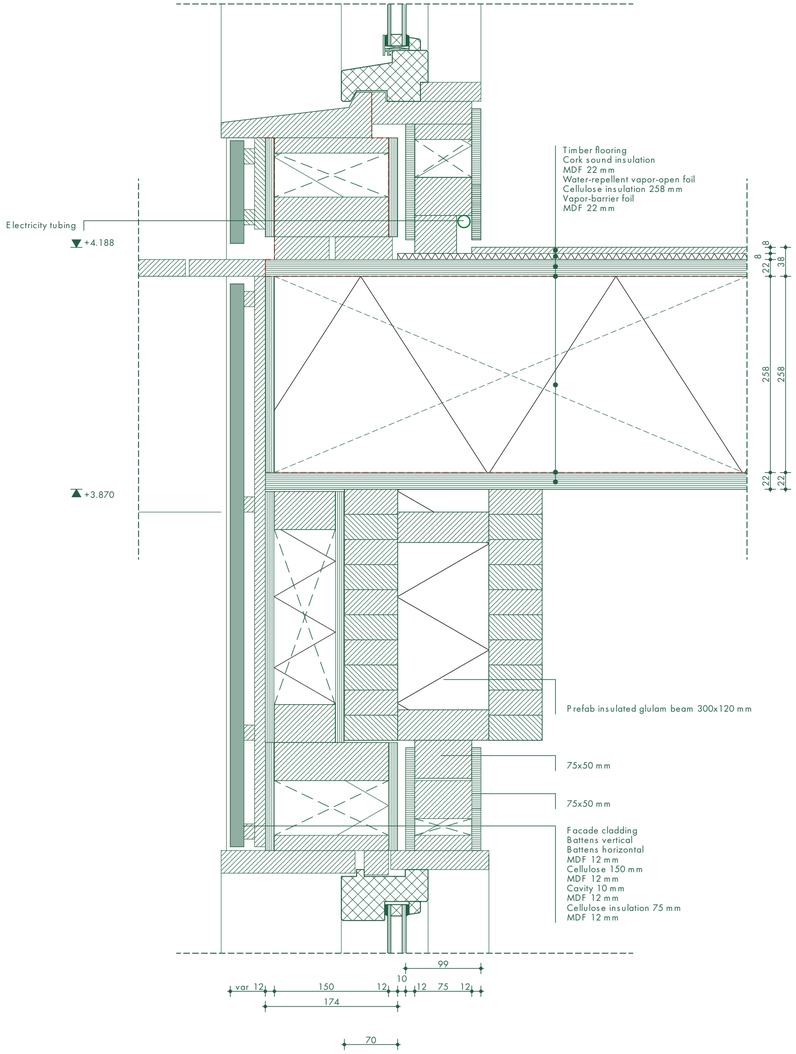




Detail

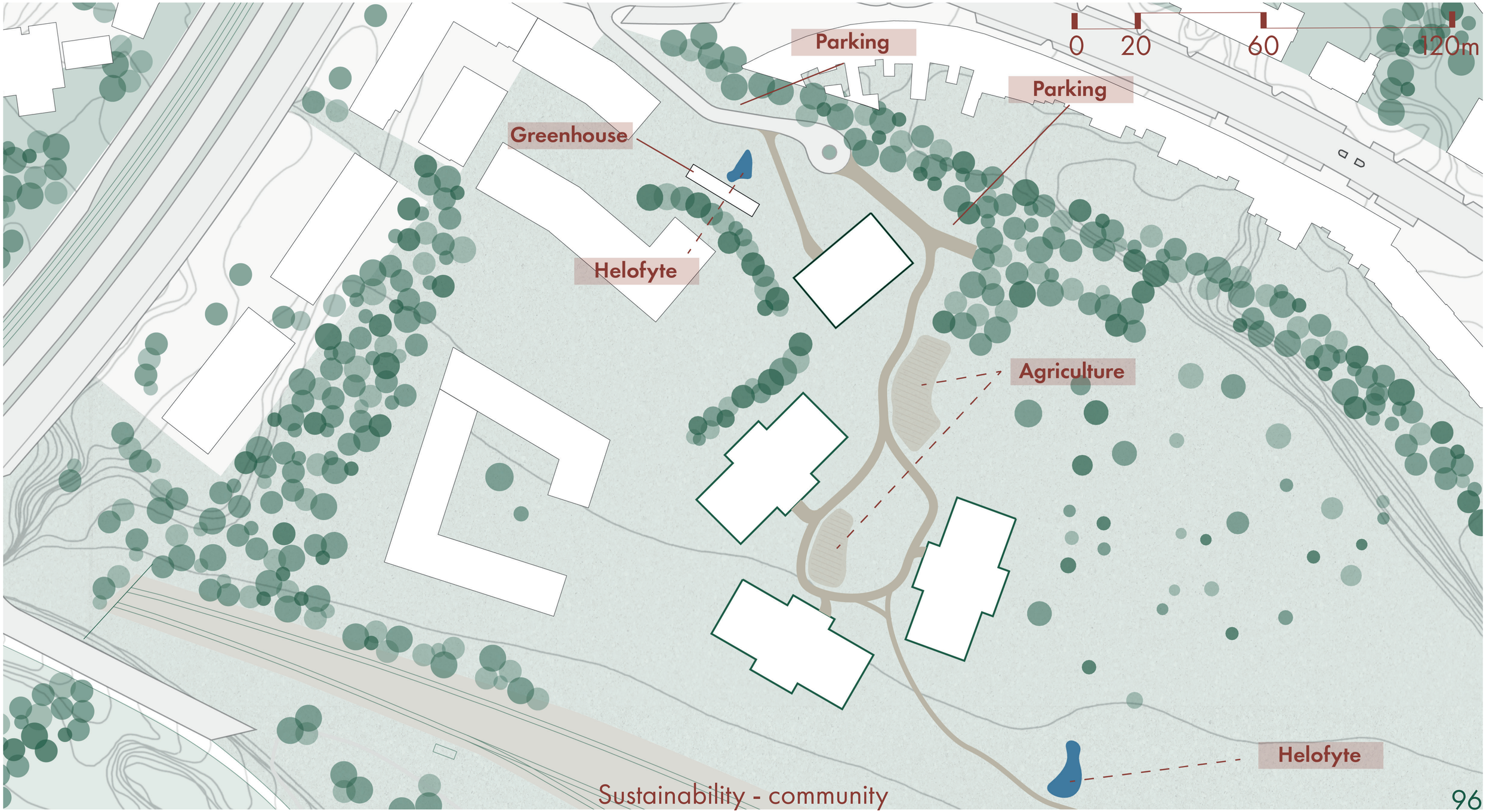
Detail 2

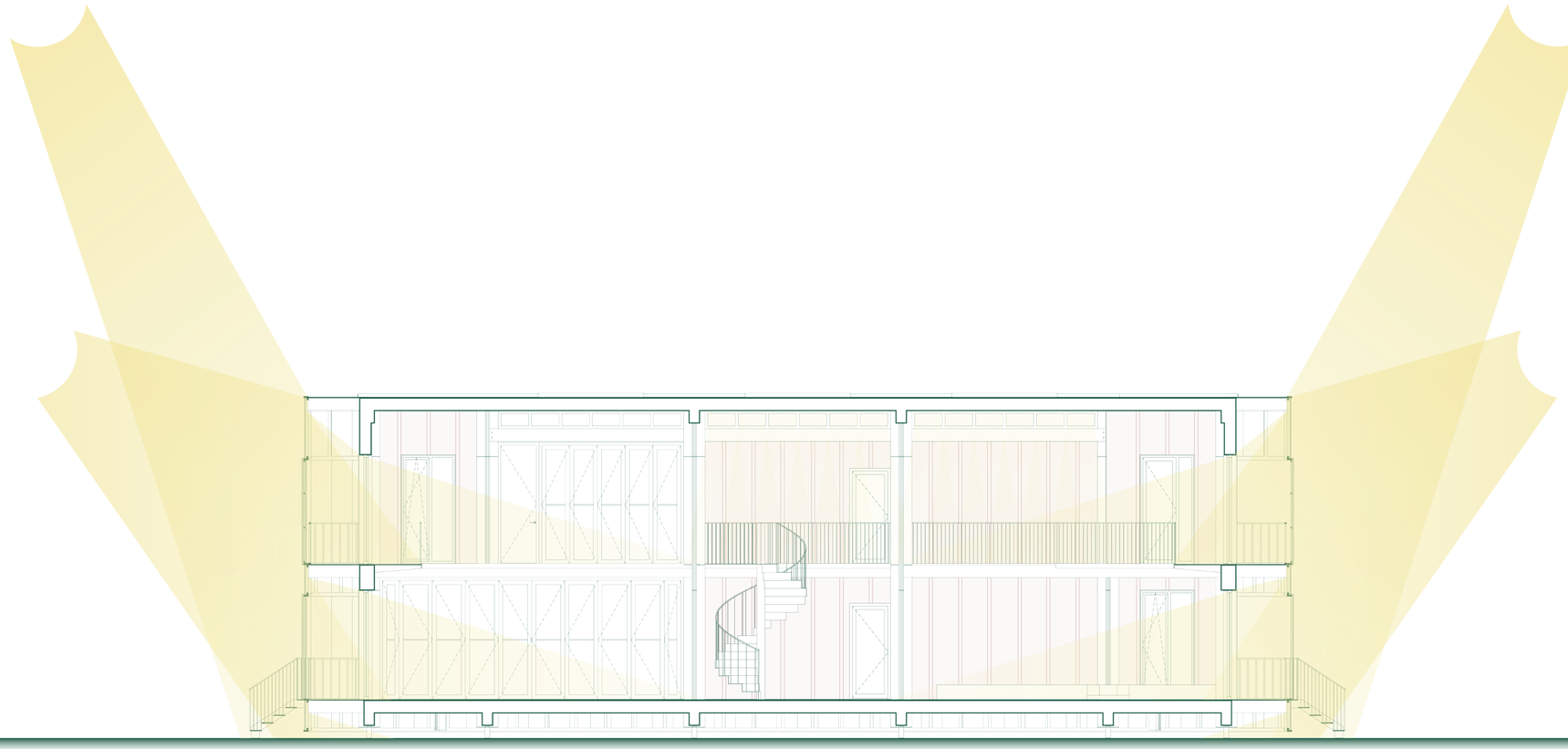




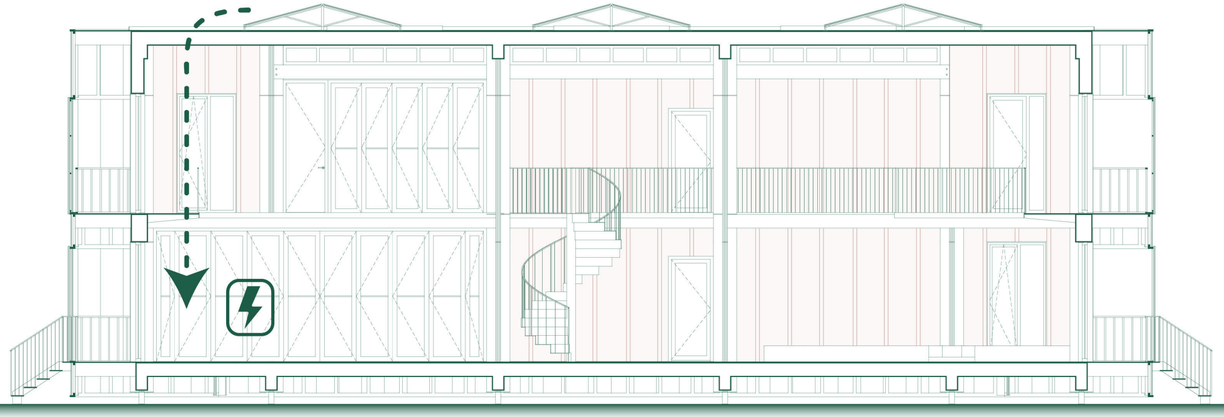
Detail



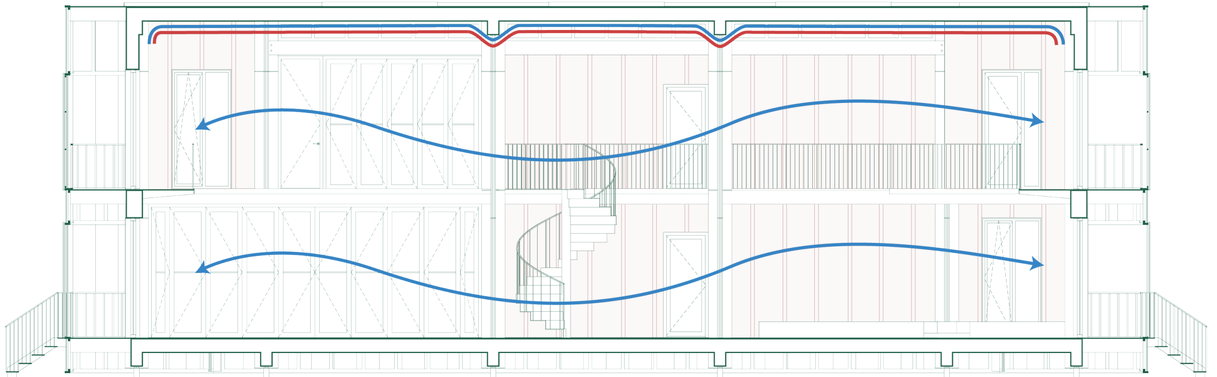

Parking
Parking
Greenhouse
Helofyte
Agriculture
Helofyte
0
20
60
120m



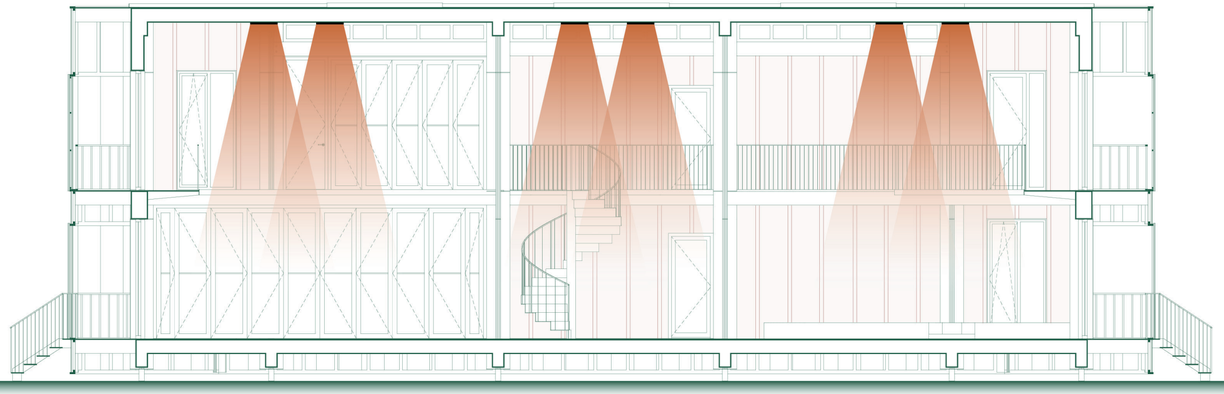
Sunlight



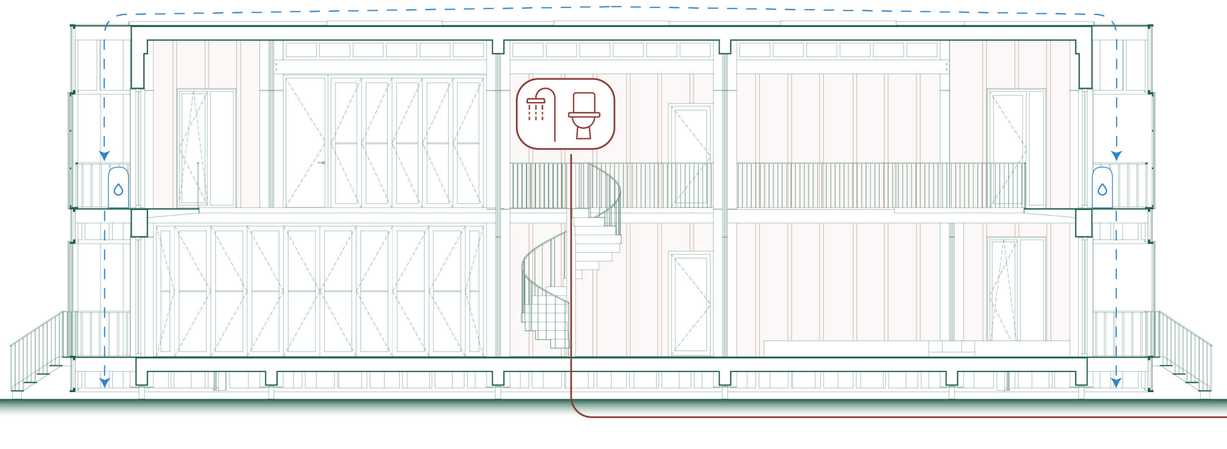
Electricity



Ventilation



Heating





Anja



Koen & Marie



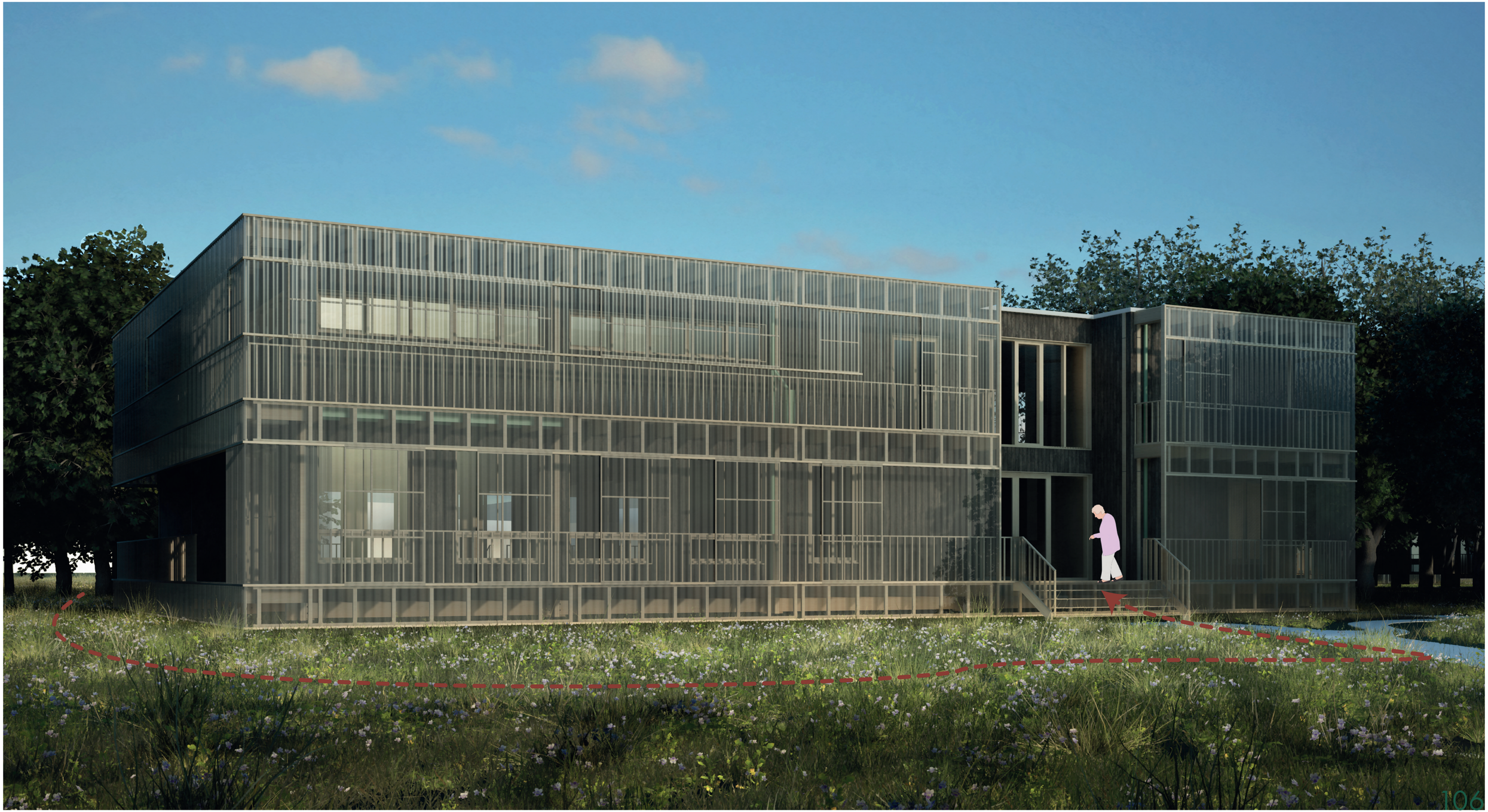
Anja

- Retired

- Gardening
- Cook













- Working

- Music
- Yoga

- Family expansion



Koen & Marie









